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MARCH-APRIL, 1942

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NATIONAL AUDUBON SOCIETY

IN TWO SECTIONS - SECTION 1

AUDUBON MAGAZINE

A BI-MONTHLY MAGAZINE DEVOTED
TO THE PROTECTION AND PRESER-
VATION OF OUR NATIVE WILDLIFE

Our Motto: A BIRD IN THE BUSH IS WORTH TWO IN THE HAND

MARGARET BROOKS, *Editor*

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Among the Authors

Dillon Ripley (p. 86) has spent the last two years taking post-graduate work at Harvard, and, incidentally, collecting oil-soaked ducks off Cape Cod on week-ends during that time.

Traveler-ornithologist Ripley is a new contributor to *Audubon Magazine* columns, but is already known to readers of *The Atlantic*, *Asia*, *Collier's*, *Natural History*, *Frontiers*, *Country Life*, etc. Not satisfied with confining himself to the periodical field, he is now at work on a book on the birds of New Guinea which is scheduled for fall publication. Yale-man Ripley has been on two expeditions to the East Indies for the Academy of Natural Sciences in Philadelphia, and the photograph here reproduced was taken when he was returning from Soerabaja, Java. His present post is that of Assistant Curator of Birds at the Smithsonian Institution, Washington, D. C.



Victor H. Cahalane (p. 101) is in charge of the Section on National Park Wildlife in the Fish and Wildlife Service, and has reason to know

whereof he speaks in his article on wildlife in our Eastern Highlands. Since 1934 his work has been concerned with the wildlife of the National Park System, work which has taken him to every national park and most of the national monuments in the United States and Alaska, and also to Mexico. Paradoxically, he still maintains that he spends too much time in the office, that "others are lucky enough to do most of the field work."

New Hampshire born in 1901, Mr. Cahalane went to Massachusetts State, then to the Yale Forestry School and the University of Michigan. A position as ranger in the Forest Service was followed by one in charge of deer investigations for the Michigan Department of Conservation. Another four years was spent as Director of the Cranbrook Institute of Science, Bloomfield Hills, Michigan.



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TRUMPETER SWAN

One of our national responsibilities is to maintain those resources that the present holds in trust for the future.

NO TIME TO FORGET CONSERVA- TION

*By Ira N. Gabrielson**

ON THE amphitheatre at the tomb of the Unknown Soldier in Arlington National Cemetery there is carved in marble the solemn assurance: "When we assumed the soldier we did not lay aside the citizen." It is a thought that might now be called to the attention of those who are tossing certain deep concerns of citizenship out of what they seem to consider the bandwagon of national defense. The vehicle of war is no bandwagon, and its use should occasion no disregard of those benefits that it is designed—by Americans—to defend.

Among these benefits is the enjoyment of a national wildlife resource, an inheritance but also a trust—a trust for Americans in the future that we are now fighting to safeguard. There are those now who by word or by inimical gesture are telling us that this is not the time to be concerned with the conservation of this resource. There are even insinuations, some of them none too subtle, that Americans who are so concerned show more regard for their own special interests than they do for the necessities of their country. Many of these critics and advisers are willing to forget—in some cases apparently eager to forget

—the national responsibility to maintain those resources that the present holds in trust for the future. Some may indeed have selfish interests of their own, but most of them are merely examples of the great American tendency to turn attention from one thing to another, according to the headlines.

It is, however, an immediate and peculiar duty of conservationists to see that these responsibilities are *not* forgotten. This is not their supreme duty, of course, yet no man has ever successfully performed one duty by shirking another. Those Americans who have been defending a national resource will certainly be double-quick in defending the nation itself, but as individuals and as groups the conservationists of the country can not and should not abandon their cause. They must adapt their activities to the major urgencies of the war, but they must also see that the long-time needs for conservation are not ignored.

These are, in fact, the very considerations that are determining the war-time policies of the agency that is the Federal instrument of wildlife conservationists. The activities of this agency, the Fish and Wildlife Service, are being drastically curtailed, not in scope but in degree. Many members of the agency's staff have joined the armed forces. Still others have joined the ranks of the agencies that are handling the government's most urgent war work. CCC camps have been reduced more than thirty percent. Materials formerly used for refuge development are going now into war construction, boats have been taken over by the Navy, and in other ways national efforts for improving wildlife conditions have been diverted to

*This article is taken in part from Dr. Gabrielson's talk before the Sixth North American Wildlife Conference at Memphis, Tenn.



Photo by Allan D. Cruickshank

SNOW GEESE

An up-hill but successful fight has been waged to restore our wildlife after disastrous exploitation in the past.

the task of winning the war in the least possible time. All these events have occurred in the midst of a fiscal year for which appropriations had already been made. Similar cuts are still being made, and plans are being formulated for the least possible use of men, money, and materials during the coming fiscal year.

This is as it should be, and further drastic diversions should and will be made if it becomes apparent that they can speed the nation to victory. There is a limit, however, to the war-time uses that can be made of men and materials and also a law of diminishing returns which becomes effective even before such a limit is reached. In other words, many war contributions can be made by such an agency, and there is a point at which these outweigh the values that can be realized by further curtailing its activities to strengthen other war efforts.

The Situation Clarified

The entire situation is in need of some clarification.

About two years ago every Federal agency was asked to specify the contributions that it was and could be making to national defense. Nearly every agency was able to make a report that reasonably led to its designation as a defense agency in the emergency that then existed. Among these was the Fish and Wildlife Service, with such contributions as providing for food supplies from the fisheries, protecting livestock, crops, and stores from predators and rodents, and encouraging a good national morale through recreation and the pride that comes to men and women who see a land of great bounty and beauty. These are reasonable influences on national defense during any emergency, and they are indeed being exerted now, as they have been in the past.

When war actually came and the nation found itself trying to make war preparations after war was already bringing reverses, trouble-shooters began to scrutinize all national defense agencies. Forgetting then the circumstances that surrounded the earlier designations, the critics began to apply a new criterion, expecting all 'defense' agencies to be actively waging war, and some of them have concluded that a unit like the Fish and Wildlife Service is not essential to the nation in time of war. It is a conclusion based on a most fallacious premise, representing confused thinking on the part of critics harried by military reverses and using their own and new definitions of the term 'defense agency,' yet it is one that we must spare no effort to correct. We must, of course, require that every agency make its maximum contribution, but we need not assume that all must be war agencies, for we must recognize that some activities only indirectly related to this conflict will be necessary for national welfare.

Major Premise

In other words, our major premise at this time must call for every possible contribution to the war but at the same time must provide for the maintenance of the nation itself during the struggle, and for the peace to come—through every effort that can not be exerted directly in fighting. This premise would then suggest the criterion: Is every possible effort being made to bring victory and is the national welfare being promoted by all the efforts that can not be directed along war channels?

All wildlife conservationists will welcome such a criterion, firm in their resolve to help win the war to the best of their ability and convinced that their conservation activities are



WHITE-TAILED DEER

Photo by Allan D. Cruickshank

"Clean waters, green fields and forests, fertile soils, an abundance of wild things, and freedom to use and enjoy these resources properly—these I hope Americans will always have."

promoting national welfare at present and for the future—a welfare which itself is a necessity for victory. It seems to me that they should examine their present situation in the light of these requirements.

More Land for Wildlife

Such an examination can be made in part by recalling the needs noted in calmer times and the progress made so far in meeting them. At the First North American Wildlife Conference in 1936, I remember we outlined a program based on what seemed then to be the outstanding needs. There were seven—more land for wildlife . . . closer coöperation of Federal and State agencies . . . closer coordination of Federal activities . . . a wider recognition of wildlife values by those who manage lands . . . efforts to correct stream pollution . . . adequate research programs . . . and protective regulations based *entirely* on the needs of *WILDLIFE*.

The six years that have passed since these needs were thus outlined have seen many accomplishments, some of them beyond our most optimistic expectations. Considerable progress can, for example, be reported in our programs to provide land for the restoration and use of wildlife. The Federal waterfowl refuge system has been enlarged, though we still need additional large refuges and numerous smaller areas to provide adequately for the birds while they are in this country. The Federal *upland* refuge system has been greatly extended. In a number of cases the President has withdrawn public lands in the West to form such refuges, and extensive upland areas purchased with Federal resettlement funds have been transferred to the Fish and Wildlife Service for wildlife uses. Many *States* have made progress in providing land for wildlife. Their

purchasing and developing programs have gone steadily ahead. They also have received a number of upland areas purchased with resettlement funds. And Pittman-Robertson funds have provided money in States where none was available before.

Closer Coöperation

~~As to~~ the second need outlined in 1936—that is, closer coöperation between Federal and State agencies—we visualized two helpful measures. One was an extension of the coöperative research and demonstration projects then established in nine States. The other was financial aid to the States by the Federal government. We have succeeded in both, though not to the same extent.

In 1936 we estimated that there should be fifteen—instead of nine—coöperative units to carry out basic research in major ecological regions. There are now ten of these units—an increase of only one—but I think that all who are familiar with their work will agree that they have met the assignment given them in fairly adequate measure. They certainly represent a close coöperation of Federal, State, and local agencies.

The feasibility and benefits of close coöperation of Federal and State agencies are most assuredly apparent in the Federal Aid program, which has been begun and well advanced in the past six years. The Pittman-Robertson Act, which provided Federal financial aid to the States in their wildlife work, has been a law now for only four years, yet 46 out of the 48 States are actively engaged in the program or have qualified for participation. I am frank to say that, so far as I can see, this program has worked much better than even the most enthusiastic supporter would have believed possible in the beginning.



Photo by Allan D. Cruickshank

WHITE IBIS AND REDDISH EGRET

Conservationists can be sure that steps are being taken to minimize wildlife losses due to war activities.

Particularly as a result of this Pittman-Robertson program and the coöperative research and demonstration units, but also for more general reasons, the coöperation and mutual confidence of the various State agencies and the Fish and Wildlife Service are better today and on a more solid basis than ever before.

Recognition of Wildlife Values

The third point mentioned in the program outlined in 1936 concerned the recognition of wildlife values by land management agencies, both public and private. Here again we can report considerable progress. Many of the public land management agencies are conscious of wildlife values and needs and to a greater extent than ever before those needs are being considered in formulating administrative programs. Private agencies have also become increasingly conscious of wildlife values, although the progress in this field has not been as great as one could wish.

Stream Pollution

It was also pointed out six years ago that pollution of waters must be stopped or reduced to a nondestructive point. Considerable progress can be reported in stopping pollution by municipalities and public agencies. Through the use of Federal funds many hundreds of sewage disposal plants have been built and the pollution sources removed. There is, however, a tremendous volume of work in this field, and no very encouraging statement can be made about industrial pollution in our waters. Very little, if any, progress has been made here, and the attitude of industrial organizations and groups is still one of bitter opposition to any attempt to clean up the streams and waters of this country. Not only that, but a

constantly increasing number of industrial plants are being built which will further pollute these waters. In many cases local interest has not been great enough or well enough aroused to prevent such development.

Adequate Research Programs

Of course, our 1936 program emphasized that research on wildlife problems should be expanded to meet the new problems that are continually produced by modern developments and that the results of this research should be freely available to all land administrative and wildlife management agencies. Here again there has been a considerable amount of progress through the ten State administrative agencies, many universities and colleges independent of any other agency, and State game commissions through the surveys and the administrative research programs with Federal Aid funds. Altogether we have accumulated a tremendous body of up-to-date information about the condition of our wildlife population and its needs. It is not yet adequate, and probably it never will be. Changing social and economic factors are constantly creating new problems, and the solution of one often results in raising unexpected problems in another field. We have perhaps not made as good progress in the field of aquatic biological research as we have made in research on land forms of birds and mammals, because it has not yet been possible to finance research on fish and other aquatic forms to an extent comparable with that dealing with game birds and mammals. There has been some increase in the research work of the former Bureau of Fisheries, now a part of the Fish and Wildlife Service, as well as by a number of State agencies, but the volume of it and the availability of men trained

in this work are still far below the needs.

Closer coordination between activities of Federal land administrative agencies was another need pointed out in 1936. Here again it is possible to report some achievements. There is actually more appreciation of conservation needs by the many public agencies in related fields than ever before. Coöperative relationships and the understanding of wildlife needs on the part of such agencies as the Public Health Service, the Army engineers, and generally the land agencies of the Federal government are better than ever before. Although there is still room for improvement, very satisfactory progress has been made. By continuous vigilance on the part of alert active conservation agencies in watching developments and in helping to create a wholesome understanding of wildlife needs, we can now expect to avoid better than ever before incidental damage to the wildlife resources.

The Needs of Wildlife

The final emphasis in the program outlined six years ago was on protective legislation and regulations based entirely on the needs of wildlife, not on the wishes of special groups or special interests. Since 1936 there has been little change in Federal protective legislation, except the addition, by special act of Congress, of the Bald Eagle to the list of those creatures protected by Federal law. Federal migratory bird hunting regulations have continued to be drawn to meet the needs of wildlife. More of the State conservation agencies also are making their regulations so as to serve the basic needs of wildlife, although there are still too many instances where the wishes of special interest groups appear to receive too much considera-

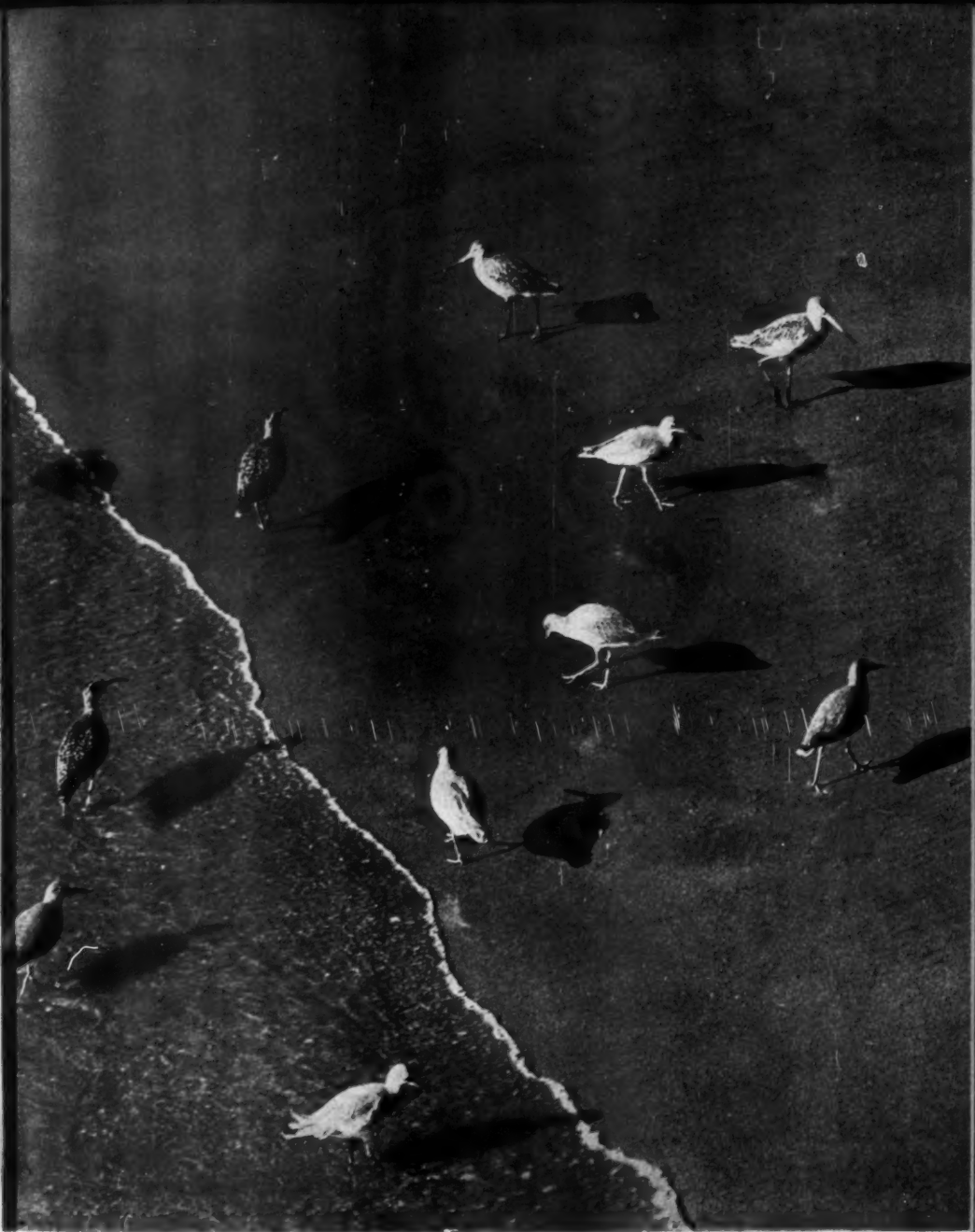
tion. Members of these groups are still somewhat vociferous, but it seems to me that in general they have declined in power and influence. More agencies are now getting into position, by State legislative enactment, to give adequate consideration to this particular field of game administration.

Recognizing Our Failures

In the past six years wildlife conservationists in this country have thus made great progress along many lines. At the same time, we may as well be frank and admit that we have failed in some things, and I am sure it will be helpful to emphasize our unmet needs and consider our failures very carefully.

One phase of the wildlife program on which we have made all too little progress has been the restoration of fur animals. At one time the United States was one of the great fur-producing nations, and it could easily recover this status by taking proper measures to increase the numbers of fur bearers. At the present time it is estimated that we are producing forty to forty-five million dollars' worth of furs as against a former production of perhaps two or three times that amount. It is difficult to measure fur animal production in money returns alone because of the fluctuations in value of skins, but it is certain that both in numbers of animals taken and in the value of skins, the fur harvest in this country is far below what it was a few years ago.

We know too little about even the basic biology of some of these fur animals, and probably there should be a complete revision of the laws and policies governing the taking of fur animals. The fur laws of many of the States are antiquated and of very little use in protecting the resource. The



WILLETS, GODWITS AND CURLEWS

Photo by Allan D. Cruickshank

One of our responsibilities is to see that the principles of conservation are not forgotten by a war-harried public.

NO TIME TO FORGET CONSERVATION

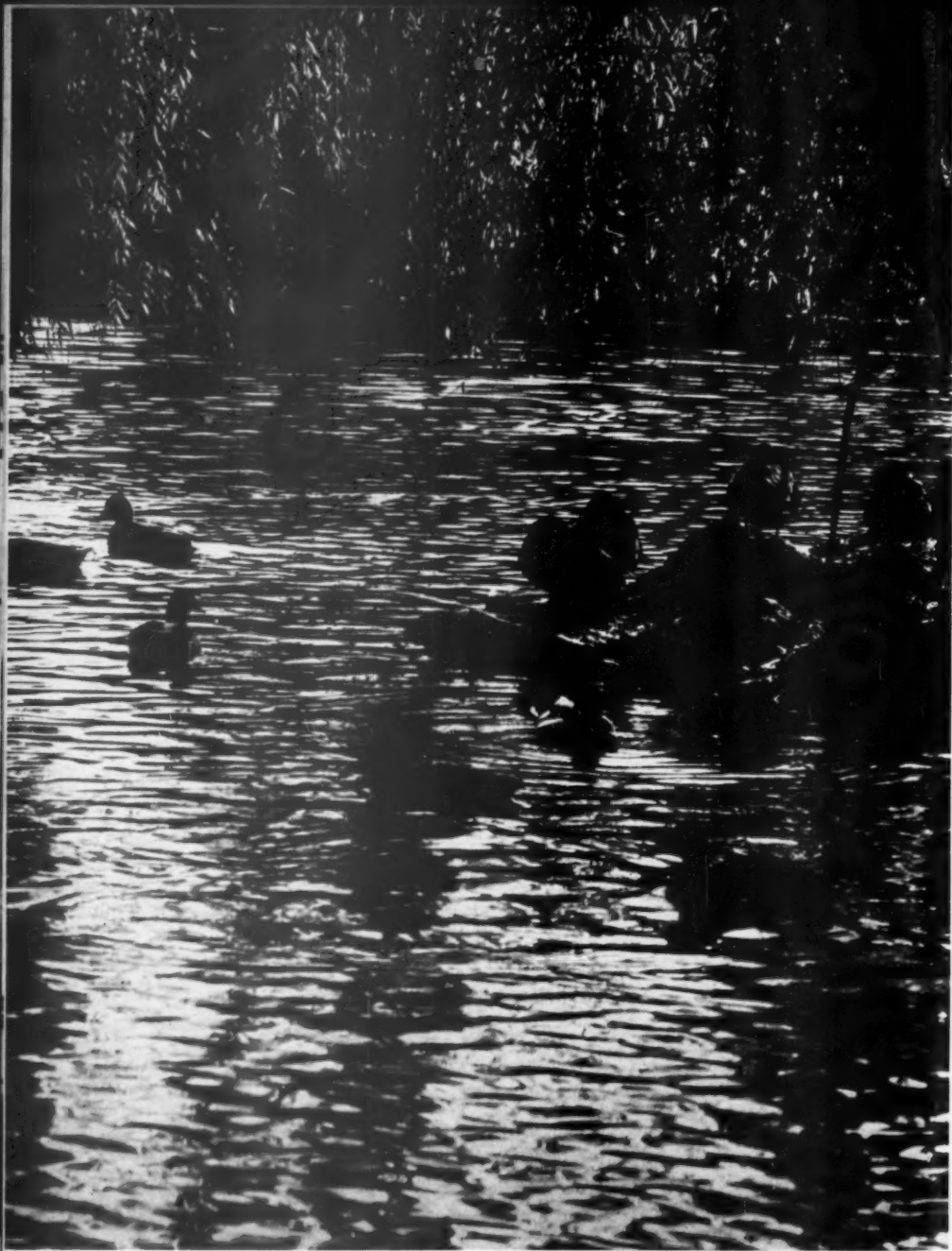


Photo by Allan D. Cruickshank

DUCKS AT SUNRISE

Selfish interests may be ready to use war conditions as a pretext for making inroads into our wildlife resources.

pressure of open competition encourages individual trappers to get all of the animals they can as early in the season as they can, and this results in undue depletion of the fur animal breeding stock and in harvesting too large a percentage of the crop before the pelts are prime. Much of the potential value of the crop is lost.

Other Standing Problems

One of our most serious standing problems concerns the loss of productive waters. The area of inland waters in this country for the production of fish life has been constantly shrinking over a great many years. Four causes have contributed to this: drainage of lakes for other purposes; stream straightening operations, which have destroyed much productive water and spawning beds in many parts of the country; pollution by municipalities, by public agencies, and by private industry; and accelerated soil erosion. The combination of all four of these factors has meant a constant shrinkage in the amount of water available for the production of fish for food and recreational purposes, in the face of a constantly increasing public demand for these resources.

A program designed to control soil erosion on the headwaters of many of the rivers which are now nonproductive is a first essential to any hope of restoring the productivity of those waters. We should give all possible support and assistance to those agencies engaged in soil conservation activities. Soil conservation is a basic need in many of our areas and must be met before our biological restoration programs will have any chance to succeed. Those of us who are interested in the wildlife resources of this country should also back every program to prevent the establishment of new sources of pollution, and we should

urge the correction of present abuses. We should also question every drainage enterprise and every stream straightening enterprise until it can be shown that resulting public benefit will justify the loss occasioned through the incidental destruction of natural resources.

To sum up: We have made substantial progress in the past six years in many phases of the conservation field, more so I believe than in any similar period in the history of this country. Yet we still have a tremendous job in restoring wildlife environment, in protecting basic breeding stocks, in cleaning up our streams and other waters, in restoring those that were needlessly destroyed, in the reforestation of our lands, in restoring our fur animals and bringing back an annual income from lands which are not now producing nearly what they might produce in returns of human value, and in providing recreation for the American public.

Such was the picture that we saw before the war dogs came upon us.

A Reasonable Attitude

Remembering thus our needs as we saw them six years ago and reviewing our accomplishments and shortcomings in more tranquil times, we are better able to take a reasonable attitude toward our war-time activities for wildlife conservation. These activities, it should be clearly understood, are not precisely war efforts, though they may be closely associated with and must inevitably be strongly affected by the war. What we can do to help win the war we must do first of all, but these contributions have been discussed elsewhere. Here we are concerned with our secondary considerations—in other words with what we can do over and above and along with our war activities to in-

sure the conservation of wildlife.

It seems to me that we have three timely responsibilities—to see (1) that our wildlife war contributions are made in the most effective way possible; (2) that every possible step which will not delay the war effort is taken to prevent incidental wildlife damage and at the same time assure the realization of incidental benefits, and (3) that the principles of conservation and the importance of an abundant wildlife are not forgotten by a war-harried public. In addition we have our constant obligation to see that the wildlife resources are maintained to the best of our ability.

Conservationists are familiar with the liaison work between the Fish and Wildlife Service and the war agencies. They can be sure that everything appropriate is being done to minimize wildlife losses due to war activities. At the same time many will be surprised to know that some losses that cannot be avoided may be balanced by incidental gains. Some areas, for example, have been turned over to the War Department for use as bombing ranges, but there are grounds for expecting that when the war is won these areas may come back with interest in the form of lands acquired by the War Department but available for wildlife uses in peace time.

It is also gratifying to note that ordnance officers are keenly aware of the dangers of pollution, and their experts have adopted procedures in pollution control that represent a far higher standard of effectiveness than are employed generally in private industry. In many instances, the adoption of pollution-control measures has resulted in the recovery of many substances, formerly discharged as pollutants into public waters, that can be converted into valuable by-products essential to the war program. The

whole-hearted cooperation of war industries in controlling pollution serves as an illustration to many private industries that the pollution-control measures they have refused to adopt under one pretext or another during the last two decades are feasible and may be profitable to the industry. Thus, our current efforts are not only promoting national defense but are also advancing the protection of natural resources.

The Value of Publicity

Such protection, however, cannot be successfully assured unless we manage to keep ourselves alert and the public informed. Publicity activities are among those being most deeply frowned upon, yet it seems to me that conservationists do have a distinct duty that can best be performed through publicity. If government agencies cannot carry on this work, then such organizations as the National Audubon Society must redouble their efforts.

In one sense I see through publicity a distinct contribution to the war effort. Men who are never able to see ball games get a considerable amount of vicarious recreation out of their sport pages and box scores. Similarly men and women whose time in the outdoors is curtailed may get some of their needed relaxation in reading, or in hearing radio broadcasts, about wildlife. Such news items and broadcasts will in some measure encourage outdoor recreation, and I believe that, like the British people, we shall find ourselves in need of this relief from the stresses and strains of carrying on our war activities.

In another sense I see conservation publicity as a national need in preventing the spread of ideas whose folly can be revealed to the public merely by a word of caution. Not long ago,

for example, I noted considerable display being given to a London report that "sparrows, starlings, crows, larks, curlews, and even swans are helping to feed Britain at war." It is perfectly obvious to the readers of this magazine that, although wildlife has emergency food values, Americans will make a grave mistake if they try at present to include song and game birds in their war-time larder. We know that the song birds will make a much better contribution to the food-for-freedom cause by making war on the insect pests of crops. Even game, which becomes a part of the nation's food supply, affords recreation that we consider even more important than the meat from the game. Yet we cannot depend on the general public to appreciate these relationships, and we must be alert to see that such publicity items are commented on promptly.

Conservation Principles

We have been waging an up-hill though successful fight to restore our wildlife populations after disastrous exploitation in the past. Game laws have been as liberal as the game could stand. Better management can increase the surpluses, and it is true at present that in some areas there is a great abundance of such animals as deer and elk that might be more wisely used to the nation's war-time advantage. Yet, selfish interests may, without discrimination, be ready to use war conditions as a pretext for making futile but disastrous inroads into this resource. If it ever becomes necessary we can fall back on our wildlife meat supply, but we can be sure that anyone advocating this at present, regarding any but those species that are locally overabundant, is either misguided or else is thinking more about his own privileges than he is about the needs of the nation. Our only way to com-

bat the war-time spread of such proposals is through making the facts and actual relationships known.

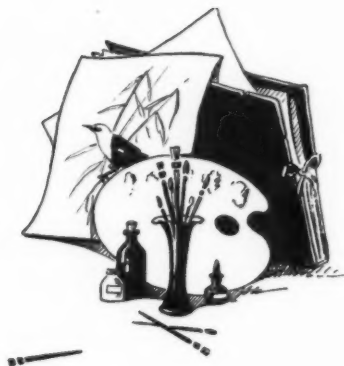
We should never forget our conservation principles, and, though we now need to devote our energies to the task of winning a war, we should do this without losing sight of the peace conditions for which we are fighting. I believe that the citizenship requirements of conservationists have been best expressed by a soldier—a veteran of the World War who has reentered the Service. What the men who are making their sacrifices in the armed forces have a right to expect of us who remain behind the lines is well expressed in a letter that this soldier wrote to the magazine *Virginia Wildlife*, published by the Virginia Commission of Game and Inland Fisheries. He said, in part:

"When I come back this time, I hope that I shall find America to be still the America of my boyhood dreams, a nation where a man of reasonable intelligence, energy, and integrity can achieve a happy life. Loving the outdoors, I should hate to find that our conservation program had been junked—not only because we should conserve the resources which have made America great, but also because I want again to fish clear streams and tramp through unspoiled fields and forests with a dog and a gun.

"I want to come back to the America I have always known—an America of freedom, of opportunity, and of happy living. It seems to me that these are perilous times, not only because we must prepare to defend ourselves against external aggressors, but also because we may forget to keep America whole. Clean waters, green fields and forests, fertile soils, an abundance of wild things, and freedom to use and enjoy these resources properly—these I hope Americans will always have."

The Wildlife Gallery

By
George Miksch Sutton



Fuertes and the Young Bird Artist

IN MY first letter to Louis Fuertes (written in January or early February, 1915), I made a very human blunder. In telling the artist how deeply I admired his work, I ran out of superlatives and began on comparatives—and the comparatives involved Audubon. From the fine, modest soul of Fuertes this evoked certain statements that probably never would have been made had Fuertes, Audubon and I not been just what we were at that moment: Fuertes the greatest of living American bird artists, Audubon an established tradition, I a mere youngster, eager as a fox whose unerring nose has just discovered the precise whereabouts of a whole covey of Quail. What Fuertes wrote to me of Audubon was this:

"Say what you will of Audubon (much of what you did say was just, too) he was the first and only man whose bird drawings showed the faintest hint of anatomical study, or that the fresh bird was in the hand when the work was done, and [his work] is so immeasurably ahead of anything, up to his time or since, until the modern idea of drawing endlessly from life began to bear fruit, that its strength deserves all praise and honor,

and its many weaknesses condoned, as they were the fruit of his training:—stilted, tight and unimaginative old David sticks out in the stiff landscape, the hard outline and the dull, lifeless shading, while the overpowering virility of A. himself is shown in the snappy, instantaneous attitudes, and dashing motion of his subjects. While there's much to criticize there is also much to learn, and much to admire, in studying the monumental classic that he left behind him. He made many errors, but he also left a living record that has been of inestimable value and stimulus to students and made an everlasting mark in American Ornithology. It is indeed hard to imagine what the science would be like in this country—and what the state of our bird world—had he not lived and wrought, and become a semi-god to the ardent youth of the land."

Thus did the great Fuertes express himself on the great Audubon. I am glad I made the comparison, 'odious' though it may have been. Fuertes closed his letter with the following paragraph. It, too, is worth a moment's study:

"I had not meant to write an essay

on Audubon—and shall not continue! I *do* want to thank you for the truly great encouragement of your letter, and to assure you that if there is any way I can help you to develop your bird-painting, I am anxious to do so." This from an exceedingly busy, successful, widely admired bird painter in the prime of life, to an unheard of lad not yet seventeen years old. Such a man was Fuertes!

Some day I want to give to the world the letters Fuertes wrote me. They reveal a man so worth the knowing, so honest, so full of understanding. In the maestro's second letter to me (March 30, 1915) part of one paragraph so ably pleads the cause of all true artists, whatever their field or medium or reputation, that it should be quoted now, before attention is paid to anything Fuertes had to say concerning problems peculiar to bird portraiture. The paragraph closes: "They [my pictures] are all far below the . . . pictures I have in my mind, and if they express any of the beauty or charm or feeling that I have in mind for them it is only because the imaginary picture is so surpassingly lovely that part of its charm penetrates through the heavy and stubborn medium of my clumsy hands, in spite of them. My only salvation is that nobody can see what I had in mind for my pictures! If we could paint without restraint or manual obstruction the beautiful pictures we plan, how we could make the world open its eyes!"

Fuertes' drawings as a rule show the bird in an average, diffused light rather than in strong, direct morning sunlight, or red afternoon light, or the green light that filters through the forest canopy in midsummer. Rarely do they give us an illusion of *atmosphere*. However detailed they and their setting may be, we do not

feel dampness, or extreme dryness, or hotness about them. They are live, breathing, individual birds, rather than part of any woodland or prairie or tundra. Fuertes was, however, keenly aware of the fact that local color varies endlessly with the endlessly varying kinds of light. In criticizing my own early pictures he said some things that young bird painters the world over may well read and ponder.

"Shadow-color is not easy at all to analyze. You have to un-know everything you have always thought and start with a clean slate—or an absolutely open mind . . . A good way to help is to take a piece of white paper, cut a small round hole in it, and study your color locally by isolating it from the rest, and comparing it with the white paper around the hole. Do this outdoors, too, and see what surprises you get as to actual color of hills, etc. in the distance. Or tear a small hole in a big leaf and look at the skyline through it. All these things will help to clear your mind of preconceived notions of color—especially it will show you that local color (by which I mean the exact color, analytically, of any given part of your whole subject, isolated from the rest) is practically never unmodified by either warm light or cool shadow; in the latter case, too, it almost invariably absorbs color either reflected from nearby objects or blue absorbed from the atmosphere. You don't have to have blue sky in the latter case. That is why your warbler looks muddy. For exercise, try greatly exaggerating the colors thus reflected, as well as the lightness of the parts that *catch* light. I don't think it will be dangerous for you to do this, for your eye and hand are both sufficiently literal to hold you safe. But I doubt if you can grasp the extent of this effect of atmosphere (to lump

you are, this week + last. We expect to open again,
as a University, Jan 1.

I had a fresh horned Owl + a magnificent
live Snowy owl come in at the same time not
long ago, and I was pretty busy with them for
a while. When I got through drawing painting +
photographing, + the white owl finally died, refusing
all food + even water, I mounted them both, + they
are up on my rest wall looking at me now, so:



I have kept busy, of course doing what I could to push
the war work of the community + living largely on faith
that things would swing back to normal, and to
tell the truth the break came before I thought it
possibly could. So while we shall have a more or
less turbulent period of readjustment probably, still
our national health is hardly impaired, and progress
must come back.

Don't get discouraged with me, but let me hear
occasionally + send me your work to see when you
have any to send.

Faithfully yours
Louis Agassiz Fuertes

Courtesy George Miksch Sutton

A FUERTES LETTER

The penmanship and draftsmanship of a great
naturalist-artist is shown in this part of a letter
written by Louis Agassiz Fuertes during the days
of World War I.

the whole gamut of complications) unless you can take a good swing out into it. Put your bird where the sun hits it, and paint it—exaggerate, if you can, the full relation of the light side and the shadow side first and, *secondarily*, work in the surface colors and markings. Take a fair sized subject, so you can study it freely: a stuffed hawk is good. Don't be afraid to spread paint.

"Your two Chestnut-side studies are just the kind of thing that will help you, the same theme under different light conditions. If you have difficulty in adjusting your markings to broader surfaces, half-shut your eyes, and thus exclude the complicating details—both of pattern and of values. Divide your bird along its 'twilight' line thus—[here Fuertes swiftly drew a small bird, its lower half in strong shadow] and keep night from day. Usually you will find the darkest line just beyond the ['twilight'] line—not at the edge, for *some* light always comes around the other way usually as a reflection from something else.

"In sunlight, everything in the lighted side—black included, will prove lighter than *anything* in the shadowed side, white included."

Thus wrote Fuertes in 1915. What he said then was true a thousand years ago, and is true today. We who paint a male Wood Duck know of the rainbows there. But the exquisite beauty of the bird is lost unless, in our painting, the rainbow is presented subtly, just as nature herself presents it. We cannot paint both sides of the Wood Duck at once. Nor can we, to save our souls, paint a three-dimensional Wood Duck unless we recognize, and represent properly, the high lights, the deep darks, and all the in-betweens of value and hue. We cannot keep turning our model. We must choose the pose, put the bird in a given set-

ting, and paint it as it appears at a selected moment. If the light catches the greens and blues of the crest and a hint of red eyelid, well and good—these bits of the rainbow have a right to go in. But we may better forget the rich rose and wine-color that we know are on the chest and rump. The shifting of high lights, the skipping from place to place of gay colors, is for the motion picture camera to record, for the surrealists to experiment with, for all of us to thrill and sigh over. Our job as bird painters is to create an illusion of this iridescent beauty by setting down what, at one glorified moment, we actually see.

The Fuertes letters from which I have quoted were the beginning of a friendship which lasted until the great artist's death in 1927. My eagerness to contribute something to this friendship led me in great excitement to send from West Virginia to Ithaca the skin of my first Wild Turkey. Fuertes was very appreciative of my gesture and, under date of January 5, 1917, he wrote me as follows:

"The turkey came this morning. It is a beautiful skin, and a most welcome addition to my collection: the only representative of the genus I have, except for a tail and wing . . .

"It arrived perfectly, and I have attached your card to it as a label. It gives the whole history of the specimen, and adds to its value by its personal quality and for the facts it bears."

I always wrote Fuertes before starting off on an expedition in the hope that I might be able to obtain some specimen that he needed. The last letter I had from him was written on June 4, 1927, only a short time before his death. The letter was gay, full of references to his Abyssinian adventures, and throbbing with plans. The flower of Fuertes' rare talent was opening its bright petals at last!

OIL ON THE SEA

By Dillon Ripley

ONE of the pleasant sights of winter is the long bleak expanse of a beach. The sun shines down brightly on the sea, rolling in green and cold. Tangles of white foam and wrack lie along the tide edge and a few patches of crusty snow reflect back the light from among the straggling beach grass. There are even ducks, Eiders, Scoters, and Oldsquaws preening busily on the sand or riding jauntily just off shore.

Approach the ducks too closely, however, and the sight is not as pleasant. Instead of springing up off the beach, most of the birds waddle down reluctantly, hovering just behind the breaking waves. As soon as you have passed, the birds are back again, struggling up through the waves onto the sand to stand there shivering, preening their soaked feathers as best they can.

Much has been written about the damage to wildlife by oil pollution along our coasts. Numerous reports have been published, such as those by Hadley, and Moffitt and Orr* on the helpless condition to which wildfowl are reduced whenever there is a great discharge of oil near shore. Recent verbal reports from the North Sea and Channel ports indicate that at the present time, as in the last war, the oil discharge from wrecked ships has been so great that the dead and

dying birds are piled in large windrows along the shore.

The question of just why ducks and gulls die when they come in contact with fuel oil or sludge thrown out by a boat is one that has provoked a good deal of discussion. Mostly it has been taken for granted that the birds were poisoned by the oil. Recently, however, some observations and experiments have revealed the following facts:

1. Salt water has a coagulating effect on fuel oil. Thus, once birds come in contact with even a small quantity, it is impossible for them to get rid of it if they stay on salt water.

2. Any sort of oil on feathers spoils the natural waterproofing of a bird and has the effect of critically reducing its body temperature.

3. As a result, affected birds tend to go into the water less and less. They gradually starve or else die of chills or pneumonia.

Two years ago, accompanied by a friend, Hugh Birkhead, I had my first opportunity of observing conditions off the coast of Massachusetts. We spent four days in February, the 10th, 11th, 17th, and 18th, at Chatham on Cape Cod. The first two days came just after a heavy snowfall. On the Cape, the weather had been bad with an unprecedented amount of snow. The afternoon of the 10th, however, was fairly mild and sunny, with a light breeze from the west and a moderate ground swell. From Chatham we worked south along the length of Monomoy Point and a short distance to the north along the bays.

Ducks were few until we reached the tip end of the Point where there was a big concentration of American Eiders and a few White-winged Scot-

*HADLEY, ALDEN H., 'A Sea-Bird Tragedy,' *Bird-Lore*, vol. 32, pp. 169-172.

MOFFITT, J. and R. T. ORR, 'Recent Disastrous Effects of Oil Pollution on Birds in the San Francisco Bay Region,' *Calif. Fish and Game*, vol. 24, pp. 239-244.



Photo by Dillon Ripley

OIL-SOAKED EIDER

Whenever much oil is discharged near shore, wildfowl are made helpless—starving or else dying of chills or pneumonia.

ers. Two or three of the Eiders appeared to have difficulty in leaving the beach, swimming off where the others had flown. Otherwise, we saw no evidence of oil on these birds. However, we found two drake Old-squaws, adult and immature, one near the end of the Point and the other among the dunes near Chatham. One bird had oil on its wings, the flight feathers of which were glued together, while the other had oil on its underparts. The adult was fairly heavy and seemed to be in fair condition; the immature was very light and emaciated. Both birds were washed with gasoline, which only served to dilute the oil so that the whole upper surface was covered with a thin film. Evidently they inhaled some of the fumes, for both immediately had convulsions, after which they remained stupefied by a 'gasoline jag' until they died. Overnight the immature died, but the adult lived and was put on my small fresh-water pond. The gasoline had evidently dis-

solved whatever body oil remained on the bird, for he became water-logged immediately, had a chill, and died the next day.

Having heard that a boat had gone ashore on Buzzard's Bay during the week, we returned to Chatham on the 17th, on the chance that oil might have been released from the boat. The weather during this time was moderate with light northeast winds and very little swell. On the way out along the Point, we fell in with a couple of clam-diggers who reported that they had killed two Canada Geese which they had found very emaciated and oil-soaked on the bay side of the beach. These same fishermen, and others, reported that the mussel beds had been much reduced by the bad weather, the incessant cold, and heavy waves. This time the beach was covered with large flocks of ducks sleeping and preening. We saw about 95 birds evidently with oil on them, as well as six dead birds all partly covered with oil. Bands of

Eiders totaling some 100 to 150 birds were to be seen on the beach and among the outer dunes along the beach. Many were covered with oil.

The ducks principally affected were Eiders, perhaps because they keep more offshore and because this is a concentration point for them. Numbers of oiled birds waddled off the beach ahead of us into the shallows. Others hid in the lee of the dunes, hoping to be overlooked. A few birds were completely covered with oil except for their heads; others had only the merest trace of a patch on breast or flanks. Many of these birds were picked up and examined; all were found to be in varying states of emaciation. Having decided that gasoline and turpentine were unsuitable through their dissolving action on the oil, a drake Eider was washed with a strong commercial soap. This cleaned off some of the oil, but again the bird's own oil was washed off as well. He became soaked and died soon afterwards.

Having tried to clean the plumage of these birds in the different ways cited above, we determined to place some of the oiled ducks on fresh water without attempting in any way to wash off the oil. A number of them were consequently picked up—Scoters and Eiders—and transported to my small pond in Litchfield, Connecticut. About half of them were put on the pond and the other half in a chicken house. The weather at this time was very cold inland (February 17), and after a single night on the water, when five of the weaker died, it was determined to place all the birds in the chicken house, where they would be sheltered.

Their first need seemed to be to drink and then to eat. They were so hungry that they overcame their natural fear of humans when food was in sight. A few deep pans of water were provided for them, and other pans full of soaked dog biscuit sprinkled with salt and a little chopped fish or

OIL-SOAKED OLD-SQUAW

Once oiled, most wildfowl are doomed; put on a fresh-water pond and given food, however, a few might survive.

Photo by Dillon Ripley





Photo by Dillon Ripley

EIDERS RECUPERATING

These birds were picked up oiled and emaciated in February; by June they were fat and in almost perfect plumage.

liver were placed nearby. After a few weeks the meat and fish ration was discontinued, and the birds continued on dog biscuit and salt alone.

All the Scoters died within two weeks, despite the fact that they ate a certain amount of food. This, I think, was due to their being wilder by disposition than the Eiders. They always tried desperately to get away when being caught and followed this up by constant hissing and snapping at all the other ducks and at us. The Eiders, on the other hand, often played 'possum' when being taken and seemed placid, when caught, seldom pecking each other and never pecking the other species of ducks. They were the first to eat, too.

By the time that the six Eiders, four adult drakes and two ducks, were placed on the pond, all traces of oil on the feathers had disappeared. I think this is due to the ducks eating it off

their feathers. Two of the drakes and one of the ducks had had spots of oil on the breast plumage and on the abdomen; here the feathers presented a somewhat dried-up appearance. Along the breast bone, the down showed where the feathers had curled up and drawn back or perhaps been pulled out. The third drake had been very badly oiled on the wings and rump—so badly, in fact, that I had trimmed the ends of these feathers to allow them to spread apart. Later examination convinced me that this procedure was unnecessary—that frequent bathing in fresh water to wash off the dirt consequent on their close confinement was all that was needed to bring the plumage back to its pristine black and white.

By June these birds presented an entirely different appearance from February. They were fat and in good health with practically perfect plu-

mage. In the last weeks they assumed a good many of the display postures, although the females showed no sign of reciprocating. These display attitudes included the extraordinary call of the drake in breeding condition—a muted but penetrating *who-whoo*, accompanied by a swelling of the throat and a stiff throwing up and back of the head. Occasionally these gestures were performed without any sign, although the bill opened. It was as if the bird was whispering. At other times, the simplest of the gestures was made—a single hiccup-like motion during which the head bobs upward and slightly outward.

Later, all these birds died during a severe hot spell when I happened to be away. I went down to the Cape several times during 1941 but without success. It was a good winter for the ducks, and there was evidently little oil about.

This winter, conditions have been different. Early in February, just when the weather was at its worst, a boat went aground within a mile of Stone Horse lightship off Monomoy Point. When I went down to Chatham two weeks later, I was greeted by the usual dismal sight.

It was pleasant and warm in the sun. All along the beach, thousands of Eiders, American and White-winged Scoters, Oldsquaws, and gulls clustered. There were even a few Common Loons and a Razor-billed Auk sitting close to the water. As we swept nearer in our station wagon, the birds hurried down into the sea, only to come out again after we had passed. Even on such a warm, placid day, they would not wait to get out of the water. Scattered along, among the dunes, in the wrack at the water's edge and even floating in the sea itself, were dead ducks, hundreds of them. The only heartening sight of the afternoon was

that at the far end of the Point. Here there are two partly fresh-water ponds. Numbers of oiled ducks that could still fly were busily washing and preening themselves in the water. From my previous experience at home, it seemed as if this might be a possible solution for these wretched birds. Provided they could preen often enough in fresh water, they stood some chance of cleaning off the oil.

Convinced now that Scoters are not easily manageable, I caught only a few Eiders and took them home, where at the moment of writing, they seem to be happy enough.

It is my impression that once oiled, most birds are doomed. Only a light open winter can save them. If they live until the summer molt, they will probably be safe. If they can find a fresh-water pond, they may be able to preen off the oil. Where conditions warrant it, an effort might be made to save some of these helpless birds by transporting them to a fresh-water pond and supplying them with food—not grain, which sea ducks don't readily eat, but fish or meat scraps and ground up dog biscuit.

A few might survive in this way, but for most of these birds which lend such color and activity to our bleak winter seascapes, the penalty for human carelessness or accident is death. Now, in 1942, war has added its burden of tragedy to the scene. Good ships and men have gone down, oil has spread over the sea, and wherever sea birds concentrate on their winter feeding grounds, the toll has been enormous. The death of these birds is a minor tragedy, perhaps, but to those who love their wild cries, it has a special meaning. It seems to be the fate of our civilization to produce casual and devastating by-products. Not least of these is the dismal and disheartening sight of oil on the sea.



The Nature of Things

By

Donald Culross Peattie



AS a resident of Santa Barbara I am expected, no doubt, to render some account of the convention of the Audubon societies of California which was held here in January. But I doubt if anybody voluntarily reads an account of a convention except to learn of the pranks of American Legionnaires, preferably in the columns of *Time* magazine.

Sensing this, I began, at an early stage in the convention to attempt to disorganize and enliven it. Failing to persuade the conventionites to break up hotel crockery, open fire plugs, place anonymous calls for the riot squad, or drop sidewinders down girls' backs, Bert Harwell and I staged an Hour of Sheer Nonsense, and I then prepared an (unpublished) report of it for *Time*:

Time Goes to an Audubon Party

To sleepy-headed Santa Barbara's famed, swanky, ostermoor-upholstered Montecito Country Club last January trooped birds of a feather and odd fish of every zoological stripe. Sandwiched in among oölogists, nidologists, herpetologists, paleo-ornithologists and many another fearsome-titled ologist, a goodly sprinkling of socialite diamond-diademed dowagers raised lorgnettes, eyebrows, as they heard Mockingbird Charles Albert Harwell, western representative of bird-protecting NAS, charge rhetorician-botanist Donald Culross Peattie with nature faking.

"No reputable scientist," spanked duck-caller Bert Harwell, "has ever heard a Clay Pigeon (*Ectopistes henry-clayi*) whistle

above middle C. Peattie's Double-breasted Seersucker cannot be seen through 8x binoculars. He is wrong when he says that he has heard Swing's White Owl every day in the year. It hoots only on Thursdays and Mondays." Harwell then gave one of his famed, roof-raising imitations, of Swing's White Owl. Quoth Raven Harwell: "Good evening!"

Quipped back punster Peattie: "The bird alluded to was Harwell's Goose, a variety of the Silly Goose (*Chen fatuosus harwellii*). Or it may have been Verdi's Warbler (*Compsiothlypis coloratura grandoperae*). My Chromium-plated Gadget is a real bird with a rip-snorting trinomial to prove it—Aoooooga aoooooga aoooooga. Any *Time* reader can imitate this sound by leaning his elbow three times on his auto horn while waiting for his wife to finish prinking."

Harwell charged that late, great, patron-saintly John James Fougère Rabin Laforest Audubon was really nothing but the lost Dauphin, prison-breaking moppet who escaped the guillotine (*Time*, Dec. 11, 1793) and whiled away his American exile painting birds. Shouted irate Mr. Peattie: "Only trouble with the Dauphin theory is that his own sister stated that unfortunate princeling uncrowned Louis Seventeenth's eyes were blue. According to Audubon's self-portrait, loaned to the Santa Barbara Art Museum for Audubon Convention Week by publisher-son of novelist Mary Roberts Rinehart, Audubon thought his own eyes were hazel."

Best U. S. guess of the week was that Haitian-born, Kentucky-roaming John James was New World's best-loved love-child, had no Bourbon or Hapsburg blood, was dual genius of art and science, needed no royal studbook.

One of the features of the convention was the exhibit of Audubon paintings at the Santa Barbara Art Museum, which generously offered to collaborate with the convention by assembling from all over the country, at its own expense, a show of the most varied sorts of Auduboniana. This included original drawings and sketches by Audubon, plates from the first edition of 'The Birds of America,' and two portraits by Audubon.

The effect of getting a group of Audubon paintings together in a regular art museum was, to me at least, quite surprising. For the fact is that the great John James, aside from a rare portrait or some dining-room art game birds and a rarer landscape, never painted a museum piece or a picture even intended for a frame or wall hanging. He painted bird portraits to be looked at in books, for purposes of bird study. So he intended his pictures to be *read*, and to stand as a more or less scientific record of gross anatomy, food habits, nidulation, with characteristic attitudes in courtship, flight, or other bird behavior. Audubon was painting habitat and, one might almost say, 'range.' Usually he couldn't get in all of these, but he put in as many as he could; if there were a way of making you hear the song, Audubon would have painted that, too!

In order to accomplish this result he painted every barb on every pinion. No ordinary artist would submit to the dictation of such microscopic copying of nature. He isn't trained for that kind of observation, and couldn't afford it if he were, for details like that cannot be seen unless a picture is inspected at very close range. And only miniatures are intended to be viewed that way. The truth is that Audubon often used a miniaturist's technique to paint Eagles and Flamingos, life-size!

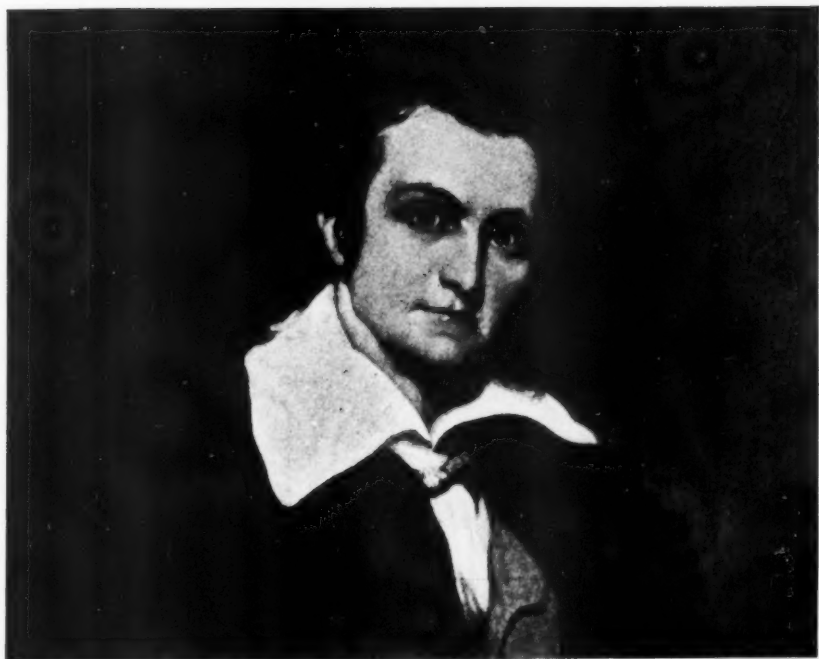
A further result of the fact that he

was illustrating American ornithology (and sticking to it with religious fidelity) rather than employing birds as beautiful models for decoration, is that Audubon turns out *scenes*—not posters. Thus it comes about that the spectator before an Audubon does not look through a frame at a composition beyond; he is himself already in the picture. It begins with his optic nerve and its ultimate limits may often be the unseen limits of a vanished wilderness, so stimulated imagination by the conjury of Audubon's reporting. For he alone of all the men had truly a 'bird's-eye view,' and what he painted was the world as his birds saw it.

* * *

By contrast, the bird paintings of Athos Menaboni, brought west for the first time by the Santa Barbara Art Museum, are the work of a gifted muralist, who has discovered in the birds of his adopted Georgia the subjects he prefers above all others, and has achieved some of the most luminous and instantaneously pleasing work of its kind that I have ever seen. The Audubon conventionites were enchanted with the Menaboni gallery; so were the natives of Santa Barbara and the directors of the art museum.

A surprise of the convention was the arrival at its doors of Jess M. Markle, a young high school teacher of Madera, California, with his portfolio of bird paintings under his arm. Bert Harwell and I saw them in the anteroom and rushed in to the meeting with them, exhibiting them on an easel. Spontaneous applause greeted each canvas of this self-taught bird artist. He explained that he had become a bird painter because he was a thwarted photographer. One hundred and fifty dollars were too much for the camera with which he had hoped to photograph all the birds of California. So he took to paint!



Painting by Frederick Cruickshank

JOHN JAMES AUDUBON

No Kentucky Bourbon, he . . .

One hundred and thirty-eight years ago this summer, Meriwether Lewis discovered the sources of the Missouri—a spring bubbling out at the foot of ancient Douglas firs and lodgepole pines, in the Lemhi pass of the Montana Beaverheads. For fourteen years young Lewis had dreamed of the moment when, first of all white men, he should stand at this mysterious and crucial spot, the headwaters of the second greatest river system in the world. For two years, for more than three thousand miles, he had journeyed to get there until on August 12, 1805, pushing on ahead of the toiling canoes, he and three others attained "the most distant fountain of the waters of the mighty Missouri in surch of which we have spent so many toilsome days and wristless nights." (Don't

mind his spelling; you and I wouldn't do any better if we had written in the light of a camp-fire after days of killing fatigue.) "Thus far I had accomplished one of those great objects on which my mind had been unalterably fixed for many years. Judge then of the pleasure I felt in allying my thirst with this pure and ice-cold water . . . Here I halted a few minutes and rested myself. Two miles below, McNeal had exultingly stood with one foot on each side of this little rivulet and thanked his god that he had lived to bestride the mighty and heretofore deemed endless Missouri."

So, of course, when in preparation for my new book on the Lewis and Clark expedition, I climbed with my family up to the self-same spot, my son Malcolm insisted on straddling the

fearsome Missouri, here a tinkling brook among rushes and alders. Where Lewis on the Continental Divide saw "heath-cocks" (Sage Hens) and "black hawks" (probably a melanistic phase of *Buteo swainsoni*) and a curious animal he could not identify, Malcolm, in a tamer age, noted Red-shafted Flickers, Mourning Doves, and Clark's Nutcrackers.

The 'curious animal' was one that gave both Lewis and Clark a great deal of trouble. Sometimes it looked to them like a fox, and sometimes like some sort of cat ('tiger kind'). A careful scrutiny of their descriptions of this creature, which they were never able to kill or capture, shows that it was the Wolverine.

But on the whole it must be said that Lewis was a most remarkable field zoölogist. He was not only brought up in the wilder parts of Georgia, and had a wide experience of wilderness Tennessee and Ohio, but he went, in preparation for this trip, to Dr. B. S. Barton of Philadelphia, to learn how to prepare and identify specimens. Unfortunately, a large part of his collection was damaged or lost in transit; other specimens were turned over, after his untimely death, to Barton, who also died without describing more than a few of Lewis's finds. So that others, who came west long after, or merely received skins from explorers, described and named a host of birds and mammals of whose scientific names Meriwether Lewis should have been the author.

Just to give you an idea into what a pre-Adamite world the explorers entered, I may mention that the Grizzly Bear was first distinguished and described, and collected for purposes of scientific record, by Lewis and Clark. The same with the Mule Deer and the Columbian Black-tailed Deer, the Sewellel, the Swift Fox, Coyote, Ante-



Malcolm Peattie straddles the Missouri

lope, Rocky Mountain Sheep, Mountain Goat, Wood Rat, Pocket Gopher, and half a dozen western squirrels, chipmunks, spermophiles, and rabbits.

I couldn't begin to mention all the birds that Lewis and Clark described, collected, observed, and often drew with care. These would make a handsome selected anthology—the bird passages in their journals. As a rule the work is Lewis's, though the credit is shared in the formal account.

But there is no doubt that these explorers were the first to note and describe that bold bird, the Piñon Jay, the curious Sage Hen, Clark's Nutcracker, Lewis's Woodpecker, the Northern Dusky Grouse, Lark Bunting and Sprague's Pipit. How they could have missed the Dipper and the Mountain Plover I don't know. But they were busy men.



Spring Is Flying North

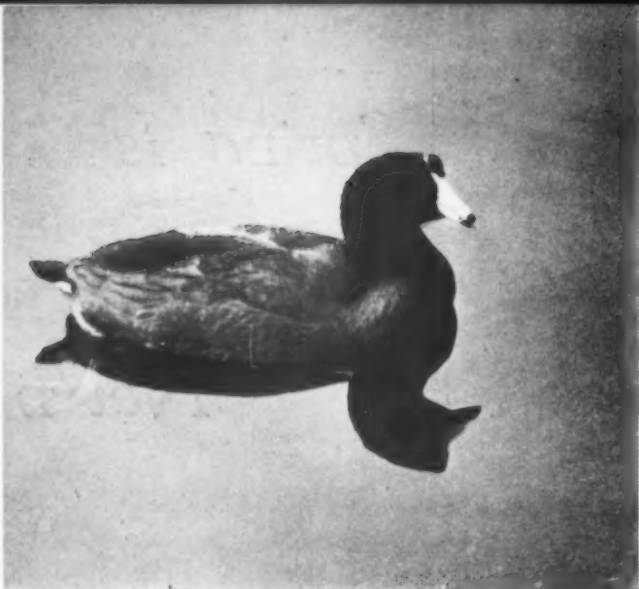
Photos by Allan D. Cruickshank unless otherwise noted

MORNING FLIGHT

Wedges of clamoring Canada Geese, symbolic of spring, preface the long train of northbound migrants.

Double-print photograph





COOT

Floating on a mirror-like pond, a Coot seems to be enjoying the first warm sun of spring.



KINGFISHER

BLUE-WINGED TEALS

One of the last ducks to come through in the spring, the Blue-winged Teals prefer to arrive long after the large Pintail flocks have gone.





Soon after the ice has gone, the Kingfisher rattles his noisy way across pond and stream.



PINTAILS Like the geese, the trim Pintails push north close on the heels of retreating winter.

VIRGINIA RAIL

After the marshes have thawed and flood waters subsided, the Virginia Rail arrives unseen among last year's cattails.





Photo by Heathcote Kimball

BLACK-CROWNED NIGHT HERON

An ungainly 'Quawk' lands on a dead branch to look over its traditional nesting colony.



RED-WING

'Vagrant' Red-wings arrive a fortnight before the first flocks of northbound males.

WHITE-THROATED SPARROW

The first White-throats of spring arrive in silence, but sing for a while before pushing on northward.



The first of the air-feeders, the Tree Swallow, is sometimes caught by late snowstorms; it is also the last of the swallows to leave in the fall.

TREE SWALLOW





PHOEBE

This year, the Phoebe reached the Northern States during the first week of March.

TOWHEE

Two weeks behind that of the Phoebe is the schedule of the Ground Robin or Chewink.



WILDLIFE VISTAS OF THE EASTERN HIGHLANDS

By Victor H. Cahalane

WHEN restless woodsmen and hunters first invaded the rugged fastness of the Appalachians, they discovered a fecund wilderness. Ridge after ridge was covered with apparently endless forests of great oaks, chestnuts, hemlocks and pines. A few Indians took little toll of the vast numbers of animals. The loot of the white men was stupendous. Great bales of Beaver and other furs, fresh venison, grouse and pigeons were floated down the rivers to glut the markets of coastal cities.

Today, less than two hundred years later, the twentieth-century traveler takes his family on a week's vacation and scoots over these once impenetrable mountain ridges from Maine to Georgia in three or four days. Eyes glued to paved highways, he dashes from the Katahdin country of Maine, through the White and Green Mountains and Adirondacks, along the blue-misted Alleghenies of Pennsylvania to the Black Range of North Carolina and Lookout Mountain at Chattanooga.

Much of the wildlife has departed. The Marten is very rare, and Beaver are seldom seen. The Passenger Pigeon has been wiped out of existence. The Buffalo and Caribou have been gone for years. The Wolverine

has taken its bad habits to distant climes. Cries of the Panther and Wolf are no longer heard.

Primeval forests have completely vanished with the exception of relatively small patches, a few square miles in extent, on the upper slopes of Mount Katahdin, the White Mountains, Green Mountains, Adirondacks, and the Great Smokies. Below these high-tide marks of lumbering, the woods are now second-growth, or, at best, culled stands. The all-aged forest of the central and southern Appalachians, with its dense understory, has been replaced by even-aged subclimax of relatively few species, running heavily to oaks. The chestnut has been practically extinguished by an Asiatic fungus.

Except in the coves, the formerly huge-stemmed rhododendrons and laurels are widely spaced and stunted by fires. The thick duff in which these and many herbaceous plants once flourished was long ago burned to mineral soil. In the northern part of the region, spruce and hemlock stands have been sharply restricted by pulpwood operations, logging and subsequent fires. In many places the white men have almost fulfilled the Indian prophecy that they would become "as numerous as the leaves in the forest." Tentacles of farmland reach through the valleys, transforming the willow-covered valley-bottoms into mowing meadows of introduced grasses. Top soil and burned humus continue to wash into the streams with every rain. The waters no longer support runs of shad, herring or salmon, for the larger rivers are laden with silt and polluted by the dumping of commercial and human wastes.

The Changed Economy

These drastic changes have wrought havoc with wildlife. For countless

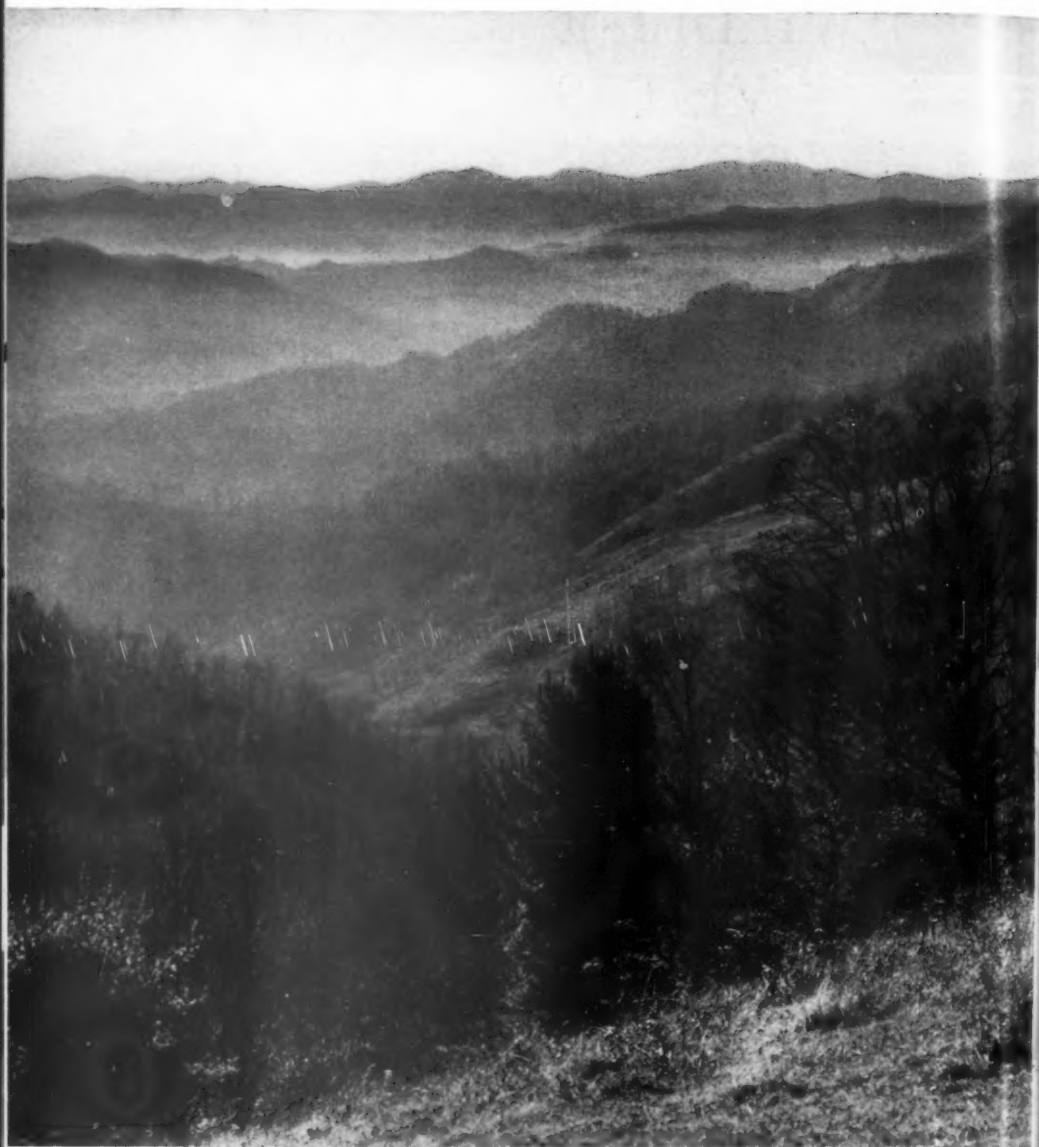


Photo by National Park Service

GREAT SMOKIES

Much of the wildlife has now departed; small patches of primeval forest exist only above the high-tide mark of lumbering.

ages it had been an integral part of the sylvan scene. From the end of the last Ice Age, up to the period of colonization, faunal changes were probably infinitely slow. Primitive man occupied his own ecological niche. His limited knowledge of mechanics prevented much expansion into the domain of the other animals. Although the red man was not a conservationist in the positive sense, his destructive effect was certainly negligible.

By 1700, the whites had become firmly established on the Piedmont Plateau and had filtered through the mountains of New England and New York. With their aggressiveness, versatility and mechanical ability, they began to use and adapt the environment to their own uses. Lacking ecological knowledge and being indifferent to the consequences of interrupting natural processes, the result was often total destruction.

Probably the Eastern Timber Wolves could not have been afforded a place in the changed economy of the Eastern Highlands. Outcasts of civilization, they would not confine themselves to areas—if any—that man might have been willing to turn over to them. When the colonists arrived, they were common—even though we may not fully credit the assertion that, in Pennsylvania, packs of 500 animals were frequent. Trouble for the Wolves soon began. Massachusetts Bay Colony established the bounty system in America in 1630 by paying one pence per Wolf. Although the animals were said to have become relatively scarce after the opening of the eighteenth century, Massachusetts' Hampshire County, during its first thirty-seven years, paid bounties on 2852 adults and 191 pups. C. Hart Merriam, in 1884, said that comparatively few Wolves were then to be

found in the Adirondacks, although "twelve years before they were quite abundant and used to hunt in packs of a half dozen or more." In their last stronghold in the Great Smoky Mountains of North Carolina and Tennessee, they were apparently exterminated in or about 1890. Hunting, trapping, poisoning, rabies epidemics, and the reduction of food animals brought the story to a close.

Probably never numerous in the East, the Wolverine did not long withstand trapping and human occupation. It was found sparingly in northern Pennsylvania but undoubtedly disappeared from that region before 1870. Merriam was unable to find a sign of its presence in the Adirondacks in 1884, and could not even locate a trapper or hunter then living who had ever seen it there. Farther north, the record is blank except for two young Wolverines that were taken east of the Connecticut Lakes of extreme northern New Hampshire in 1918. On the basis of this paucity of records, we can consider that the species has been completely extirpated from the Eastern Highlands.

Considerable numbers of Eastern Bisons were found by early travelers in the mountains. The greatest numbers seem to have been in western Pennsylvania and in West Virginia where, on the headwaters of the Ohio, numerous accounts spoke of "great number" and "infinite quantities" of Buffalos. The last survivors, a cow and a calf, were killed in 1825. Bisons, which formerly summered in the mountains where Daniel Boone had found vast herds, had disappeared from east Tennessee two years earlier.

The Woodland Caribou's range within historic times was restricted in the eastern United States to Maine, where they were numerous, and to northern New Hampshire and Ver-

mont, where they were found in small numbers. They were first mentioned in reports of the Maine Game Department in 1886 as being plentiful. Many were killed in the long hunting season, but officials concluded that "of all our game animals the caribou is the most capable of taking care of itself." Successive reports were reassuring; in 1895 the herds seemed to be increasing. Then, without warning, came the alarm of 1896: "the caribou are fast disappearing and will very soon be practically extinct unless a closed season is instituted." The season was closed in 1899 but the animals never 'returned,' with the last authentic record coming from Mount Katahdin in 1908. There is little mystery in this story. Lumbering and fires destroyed the great tracts of forest needed by the highly migratory animals; overhunting did the rest. Unfortunately, the range of Caribou in Canada is shrinking rapidly and reestablishment in our own country seems unlikely.

Wishful Thinking Won't Help

The story of vanishing species is not confined to mammals. Passenger Pigeons once existed in the Eastern Highlands in great flocks. Their tragic history of slaughter that led to final extinction is too well known to need repetition. In the southern part of our region, Paroquets were once numerous—the Carolina subspecies on the eastern slopes and the Louisiana Paroquet on the western. Hunting and persecution as fruit-destroyers evidently reduced their numbers below the limits of perpetuation, for the last of the species was seen about 1904.

Such are the stories of mammals and birds that have disappeared from the stage of the Eastern Highlands. With the possible exception of the Caribou, no wishful thinking or zealous action

of conservationists will bring them back. They are either gone from the earth or cannot be restored to this region because of changed conditions.

Do Some Still Have a Chance?

What situation faces other species that are dangerously reduced in numbers, but which, being yet in existence, still have a chance?

The American Black Bear's range has been greatly restricted since colonial days, when it furnished a substantial part of the staple diet of hunters and settlers. By the opening of the present century, Bears were practically exterminated in the northern half of the highland area, with the exception of the Maine and Adirondack wildernesses. Since conservation sentiment has developed, however, Bears are no longer rarities. They are found wherever large blocks of woodland exist. In Vermont, Black Bears are holding their own, despite the lack of any legal protection until 1941. They still persist in north-central and western Massachusetts, and a lone straggler was seen during 1934 in the northwestern part of highly industrialized Connecticut. Bears are considered numerous in Pennsylvania, where they are important game. Probably the Black Bear is as common in the Eastern Highlands as joint occupation with man will permit.

The case of the American Marten is a sad contrast. Because it wore a valuable coat, it was hunted and trapped to the verge of extirpation, even from the wildest parts of its range. The last Pennsylvania Marten was taken in 1890. Once common on the higher spruce-covered ridges of Vermont's Green Mountains, records of the past three decades are only three in number. Martens are probably now restricted entirely to the Adirondacks, where they appear to be in-



Photo by National Park Service

ELK

Introduction of a western subspecies met with little success in the East, where Elk were exterminated by 1900.

creasing, and to the coniferous forests of Maine.

The Era of Extermination

The Fisher or Pekan once ranged over the entire Eastern Highlands to North Carolina. It is now practically gone, owing to trapping and, perhaps in small measure, to destruction of much of its preferred habitat by logging and forest fires. A few are left in central and northern Maine; the species is nearly, if not entirely, extinct in Vermont. Shoemaker believed that the last one in Pennsylvania had been seen during 1901 in the Bald Eagle Mountains. Despite field study by numerous biologists in the Great Smokies during the past six or seven years, no trace of a living Fisher has been found there. It is difficult to justify even the bare hope that

this species will be able to recover in the East.

The Indians highly prized the Otters for their soft, dense fur. Made into clothing, it kept out the winter cold as did no other fur except the Beavers'. As these animals became more rare through the white man's trapping operations, their value increased. In the Eastern Highlands the species persisted through the Era of Extermination in only a few secluded localities. In the North, the Canada Otter is still occasionally taken in Essex County and other parts of Vermont. Records from western Massachusetts show that trappers succeeded in catching 20 to 35 Otters annually during the late 1920s. In Connecticut only the wild northwestern counties harbor these animals regularly. South of the Adirondack wil-



Photo by Fish and Wildlife Service

CUB BEAR

Due to conservation sentiment, Black Bears now roam through the East wherever large blocks of woodland exist.

derness, where they seem to be coming back, their status is in doubt. A few live in scattered localities in Pennsylvania and West Virginia. A paler subspecies, the Carolina Otter, persists in the western Carolinas (as well as in the low-country swamps) but is undoubtedly scarce. If sustained high fur prices do not result in extirpation of both eastern subspecies from the Eastern Highlands, the northern Otter at least may have a good chance of recovering to fair numbers.

Bounties Were Liberal

There is no valid evidence of the present existence of a single Cougar anywhere in the vast wilderness from Maine to Georgia. These great cats were once numerous throughout the region. Colonists terrified their children into instant obedience by threatening 'Catamounts' or 'Painters.'

Apparently they harmed no human beings but, because they killed cattle at times and looked dangerous, they were vigorously hunted and trapped. Bounties were liberal. Massachusetts offered as much as £4 a Panther in 1764, and the goal of extermination in that State was apparently achieved before the end of the century. In Centre County, Pennsylvania, 600 Panthers were killed between 1820 and 1845. Luzerne County, in the same State, paid out \$1822 for scalps in the period 1808-1820; over 50 animals were killed in one year alone. Nearly a hundred were taken from the Adirondacks between 1860 and 1884. And so the story goes in State after State. During recent years we have only 'reports.' Perhaps some are reliable. Kellogg cautiously says that "there appears to be some evidence of the continued existence of several

panthers in Randolph and Pocahontas Counties (West Virginia) in 1935 and 1936 . . . One was seen on Roan Mountain (on the boundary between Tennessee and North Carolina) in 1937." In Vermont, there have been constant reports since 1934, but in spite of the hundred dollars reward offered by a State newspaper, no one has been able to produce a native Panther, alive or dead. If not already extinct, there seems little possibility that even a small number of eastern Cougars could continue to find a haven in our modernized mountains.

The Canada Lynx was probably never common, but it has been reduced to rarity by trapping, forest clearing and burning. Still found from the Great Smokies to Maine, it exists only in the roughest country and deepest forests. It may continue to persist for many years.

To Europeans, one of the most tangible assets of the North American wilderness was the Beaver. Enormous numbers of pelts were taken for robes, coats, trimmings, and for making tall hats. In 1671, van der Donk stated that the new Netherlands wilderness (most of which is within the limits of our region) "furnished 80,000 beavers per year." These easily trapped animals were nearly or quite extirpated from Massachusetts before the Civil War, from Connecticut by 1842, from Vermont by 1870 or before, and from Pennsylvania about 1913. Colonies have been reestablished in most of the eastern States during the past twenty years by transplanting from other regions. In many parts of New York State they are now common. Beavers contributed much of value in the ancient economy of the Eastern Highlands. They acted as stream-control agents and provided habitats for fish and water-dependent animals such as the Otter, herons,

ducks and numerous other birds. Unfortunately, they can never again be allowed to reach abundance throughout the region because of their potential nuisance to transportation lines and agriculture.

What of the Elk and Moose?

Extirmination of the eastern Wapiti or Elk was a wildlife tragedy closely linked to that of the mountain-living Bison, although the Elk was able to hold out longer. Wapiti were originally found throughout the highlands, excepting Maine and the remainder of eastern and southern New England. They continued to be fairly numerous in the Pennsylvania Alleghenies until the beginning of the nineteenth century, when the slaughter gained momentum. The last Pennsylvania Elk was shot in 1877, the species already having disappeared from other eastern States.

The Rocky Mountain Wapiti, believed to be a different subspecies, has been introduced to a number of localities in the East. Although they showed signs of becoming reestablished in New York, Pennsylvania, Virginia and North Carolina, it is generally conceded that Elk cannot be economically reintroduced into the altered habitats of the East.

The American Moose originally ranged south in the mountains to Pennsylvania where, in 1783, they were said to have been locally numerous. In Vermont, Moose were populous in colonial times and furnished an important source of food but, because they were such conspicuous and easy targets, did not long survive. Moose were extirpated from Pennsylvania in 1790 or 1791, and from the Adirondacks about the beginning of the Civil War. They were practically extinct in New England, excepting Maine, by the opening of the nine-



Photo by Dept. of the Interior

LUMBERING AND FIRE

Great tracts of forest have been destroyed, which were vital for the existence of many of its original inhabitants.

teenth century. However, they have continued to appear at intervals in New Hampshire, Vermont and Massachusetts, reputedly wandering in from wilderness areas in Maine or Quebec. During the past decade, increasing numbers of Moose and their signs have been seen in Berkshire and Hampshire Counties of Massachusetts, and in many parts of Vermont and New Hampshire. It is unlikely that the species can ever again become abundant in the region outside of Maine. At the same time, it is true that all State game commissions and an awakening public are interested in ensuring that the few remaining animals be protected from molestation.

Birds Not Exempt from Persecution

Many birds have been dangerously thinned out through the Eastern High-

lands. Both the Bald and Golden Eagles once occurred more frequently there. Unfortunately, they have been decimated throughout the eastern United States. These great birds offer conspicuous targets to hunters and are the objects of predator control campaigns. Public sentiment toward the national bird and its brown cousin is changing slowly to a more favorable attitude, and it is encouraging that Federal legislation has been enacted affording complete protection to the Bald Eagle throughout the continental United States. Other raptorial birds are still vigorously persecuted, especially in backwoods districts. Resident Duck Hawks are rare; egg collectors and inquisitive pseudo-naturalists are largely responsible for a slow but steady decrease. In 1934 biologists of the Massachusetts Game

Commission were unable to find more than twelve breeding pairs of Duck Hawks in the entire State. Only four of these produced young; the nests of others were robbed or the parent birds killed.

Disregarding the fluctuations that are a normal phenomenon of the family's population, grouse in the Eastern Highlands have decreased during the present century. Because of its importance as a game bird, the Ruffed Grouse has been the object of solicitous thought and scientific research. Little actual information is at hand to enable wildlife managers to determine definite causes of depletion or, more important, to advance possible remedies. The Canada Spruce Grouse of northern New England has also seen a marked decline. Its outlook is even darker than for the Ruffed Grouse, which seems to possess some ability to meet and adapt itself to increasingly unfavorable environmental conditions.

"Turkies . . . turned to the cooke roome"

The eastern Wild Turkey has disappeared from all but a very few isolated localities in the southern Appalachians and in some of the coastal swamps. During early colonial times they were abundant. Thomas Morton, writing on the wildlife of the Massachusetts Bay Colony in 1632, said that "turkies there are, which divers times in great flocks have sallied by our doors; and there a gunne, being commonly in a rediness, salutes them with such a courtesie, as makes them turn to the cooke roome." The Indians told him that there were more Turkeys in the woods than they could count. Two hundred and nineteen years later the last Wild Turkey in Massachusetts "turned to the cooke roome." Fortunately, it has been

found possible to rear this species under artificial conditions. Although most of the reestablished birds are contaminated with domestic blood, some good stock still remains. Continuous effort will be needed to maintain a high standard of purity. It is possible, however, that eventually much of the former upland range may be repopulated with fairly satisfactory birds.

Two birds of the deep wilderness—the Pileated Woodpecker and the Northern Raven—have been decimated by destruction and human occupation of their habitat. At one time the big woodpecker seemed destined to eventual extermination. During the past two decades, however, it has come back surprisingly well, and in some places has become numerous again. The Raven is also no longer in a precarious position, although it is not by any means common even in the most favorable localities.

Exotic vs. Native Species

Certain introductions of exotic species have been made that may or may not prove troublesome to native species eventually. The European Hare has been brought into New York State and western Connecticut, where it appears to be successful, and has spread to surrounding States. In 1912 about fifteen European Boars were introduced to a Great Smoky Mountain preserve on the North Carolina-Tennessee boundary. About a hundred animals escaped in 1920 and, although decimated by cholera contracted from feral swine, they now number about 250. A recent Forest Service survey concluded that "at present there is no severe conflict between the wild boar and other game species." It is conceded, however, that Boars destroy the nests and are food competitors of Quail, Ruffed Grouse,

and Turkeys. They also eat the food of Tree Squirrels, Chipmunks, Opossums, Raccoons and Deer.

Other exotics like the English Sparrow and European Starling are finding relatively minor niches in the ornithological picture. Fortunately, they have not maintained their early promise of creating considerable havoc among our native birds.

The introduced Ring-necked Pheasant has become widely established. It undoubtedly does some damage to ground-dwelling birds, but it has also absorbed considerable hunting pressure to the benefit of Ruffed Grouse, Turkey and Bob-white.

What of the Future

In evaluating prospects for the conservation and possible restoration of our depleted species, certain dangers must be recognized. In this commercial age there is relatively little tendency to reserve essential habitats for the use of animals that have inferior value for sport or fur. Pressure of human needs forces rotation of forests on short cycles. Climax forest, supplying certain foods and habitats ab-

sent from younger stands, is becoming rare in the Eastern Highlands. Once cut, it is not likely to be replaced. The richer bottomlands will not be allowed to revert to alder, willow and *Ceanothus* swamps. Continued restriction and elimination of a number of environments will be almost sure to have a detrimental effect on conserving certain vanishing species.

Some fauna have apparently dropped below the minimum population needed to ensure breeding and reproduction. If adults are not sufficiently numerous to meet and mate, thus providing an annual increase at least equal to deaths, the species face extinction in that region.

Another danger to wildlife lies, paradoxically, in the intense interest now expressed for its welfare. With characteristic American impatience, we want to bring wildlife back overnight. Animals are enthusiastically live-trapped or reared, transferred to new or depleted habitats, and released. Unfortunately, these zealous efforts are often wasted and are sometimes harmful. Transported animals frequently find it impossible to cope

WILD TURKEYS

Abundant during early colonial times, they have disappeared from all but a very few isolated eastern localities.

Photo by Fish and Wildlife Service





Photo by Fish and Wildlife Service

MOOSE

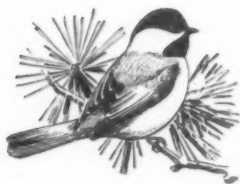
It is unlikely that this fine wilderness species can ever again become abundant in the region outside of Maine.

with climate or other conditions to which they are unaccustomed. Hybrids will usually return in time to the local standard through continued operation of natural selection. There is some chance that the mongrel stock will be inferior to either of the parents. More pugnacious imported species may drive out native animals. New diseases may be introduced. Unless the native stock has been extirpated, importation of species seems undesirable from the standpoint of science and in the interest of preserving our native wildlife free from contamination.

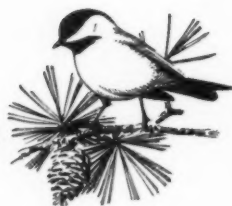
The outlook for most of our depleted species, however, is not discouraging. There is keen appreciation of the need for closed seasons and for adequate refuges where game will

be assured protection at all times.

We have come a long way since the days of market hunting, of legal jack-lighting, or snaring and running deer with hounds. Scientific and popular organizations, multiplying overnight, disseminate information and take direct action to save species and habitats. Conservation education is bringing up a new generation with better knowledge of wildlife values and requirements. Through greater knowledge gained by trained biologists, there is a tendency for wildlife legislation to be founded more firmly on fact rather than on conjecture or opinion. Although we can never restore the rich fauna of the early highlands, we are making definite and intelligent progress toward conserving the wildlife that remains.



The Director Reports to You



EVERY American life is deeply affected by the war, which is less than half a year old. And every American sees, coming down the track, modifications of routine and upset of normal plans, undreamed of yesterday.

The National Audubon Society is no exception. It does not and probably could not claim priority ratings in the use of its cars and boats. Many of its most valued staff members will not or perhaps could not claim exemption, if of draft age. Two wardens have already been called to the colors from the southwest Florida patrol; from Audubon House we have sped on his way our mail and shipping-room clerk, an invaluable employee of eighteen years' standing. Perhaps still other young men may have to go.

Stretching Our Rubber

But we are going to carry on with all our activities just as long and as far as circumstances and war regulations allow. Restrictions on the use of gasoline haven't yet come, but tires for our patrol by car loom as a problem to which we know no ultimate answer, any more than do civilian businesses throughout the country. We're economizing, but not giving up patrol in vital regions or on the highways where we have long tried to protect birds from roadside shooting, as along the Tamiami Trail, and on the Ingraham Highway to Cape Sable.

The rubber shortage, which is hurting the Florida tourist trade and greatly restricting the movements of

citizens in California, country of vast distances, has still not seriously diminished the enrollment for our wildlife tours in those two States. Florida is in gloom about its tourist traffic, yet enrollment for the Okeechobee-Kissimmee tours is 80% of full capacity. Enrollment in the California desert tours is running 50% over last year's total. A tribute, we think, to the lure of the wildlife tours, under acid-test conditions.

Daily hauling of supplies to the Audubon Nature Camp in Maine raises an immediate tire problem; but we expect to operate this year with as big attendance as in the past. The economic and war-time status of typical enrollees—teachers, scout-leaders for girls and boys, nature counsellors for summer camps, librarians and lecturers—would seem to justify that expectation. We feel that because of the nation-wide influence of such campers and the intensified need of conservation education, we must keep the camp operating as long as we have rims left on our wheels.

Subs and Poachers

With enemy submarines operating off the coast of Florida and in the Gulf Coast, the U. S. Navy is bound to take a new view of all forms of water travel, even of our boat patrols of the sanctuaries all the way from Key West to Brownsville, and points intermediate like the Rainey Sanctuary on the Louisiana coast. At present the chief restriction is on running after dark;



Photo by S. A. Grimes

SNOWY EGRET

One of our roles in a world at war is to maintain a vital program of protection for endangered sanctuary birds.

our boats in Florida have to stay anchored from sunset to dawn. This might seem to leave the way open to game law violators and disturbers of the rookeries, but the probabilities are that they will not care to risk the Navy patrols with their powerful searchlights and shoot-on-sight orders. Even if only arrested, the case of law violators is not too good in these short-tempered times.

However, further restrictions upon deep-sea fishing may well cause fishermen who used to go after marlin and sailfish to come into sheltered waters where our bird roosts and rookeries are located. This calls for increased patrol, to prevent well-meaning but damaging disturbance, especially in southwest Florida.

Casualty in the Audubon Navy

And just at such a crisis our faithful Warden Karcher, while aboard the *Audubon*, flag-ship of our little navy, was stricken with a slight paralysis of the right side. An old Navy and Coast Guard man, he had been pensioned because of a heart condition, which however did not prevent his doing boat and car patrol for us in this critical area.

Luckily, Bob Allen was on the spot at the moment; he was gathering up his equipment used in the Roseate Spoonbill research and was about to proceed to Louisiana and Texas, to carry on important ecological studies. So he has temporarily taken over supervision of all South Florida warden service. And in the meantime Karcher is recovering, is cheerful and full of interest in the work, and talks eagerly of the day when he can go back on the job.

Birds under the Flag

The day after Pearl Harbor, Rear Admiral O. G. Murfin, Commandant

of the Fourteenth Naval District, received from Mrs. Helen Shiras Baldwin, Secretary of the Manuiki Audubon Society of Hawaii, a letter asking the Navy to do everything possible for the better protection of the nesting sea birds on Midway and Wake Islands! The letter, of course, was written before the Japanese attack. Sadly the good Admiral replied that the Navy would still try to consider the welfare of the birds, as long as it could hold these outposts.

Wake is gone, and with it, its heroic defenders. How the birds fare under Japanese rule can be left to anybody's conjecture. Midway, about whose strange and beautiful bird population this magazine has already carried articles, is still under the Stars and Stripes. And still stands the Fourteenth Naval District's order #14-39.

It is forbidden for any person to hunt, trap, capture, or wilfully disturb or kill any bird of any kind whatever, or to take the eggs of such birds, on Midway or Wake Islands, except by authority of the Commandant.

Is there another country in the world whose armed forces would, even in time of war, disturb as little as possible the lonely breeding rocks of sea birds? Indeed, wherever defense projects have seemed to threaten American wildlife, our government has, when attention was called to the point, immediately tried to give wildlife interests every consideration consistent with full defensive measures.

Axis Victims

Oil is an old enemy of any birds that alight on the water. And oil on war-troubled waters makes matters worse; now much worse with torpedoed tankers. Where the oil burns, it is presumable that the damage to bird life may not be great. But Ludlow Griscom writes us that at Monomoy, Mass.,

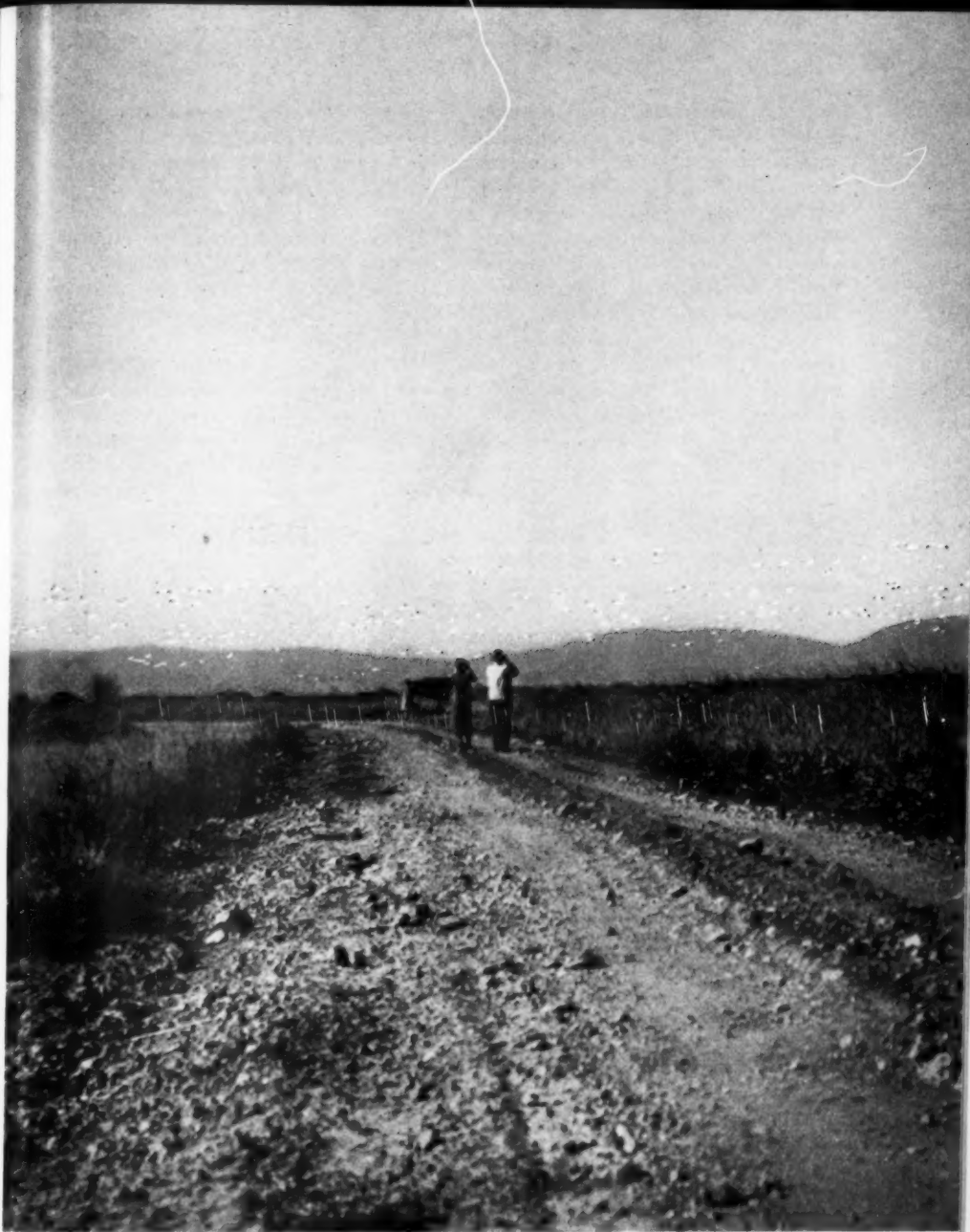


Photo by Allan D. Cruickshank

SNOW GEESE ON A WILDLIFE TOUR

A fine tribute to the lure of wildlife tours under the acid test of war-time conditions has been an increased participation in the California tours this year.

after submarine attacks on oil tankers in February off our eastern coast, he estimated that 25% of the wintering seafowl were more or less badly affected. It was pathetic in the extreme to see the birds struggling, starving, and dying. In their frantic efforts to cleanse themselves of oil, birds often pull out the befouled feathers, which, of course, only allows the stuff to penetrate more deeply. Alas, these conditions are beyond our control. Only the Navy can make it too unhealthy for submarines to raid our shores, and at present it is necessarily keeping sternly to convoy duty and is not to be scared home by attacks on coastwise shipping.

Unfair Game

Unconfirmed but persistent news items from Britain tell of the use of common birds there for food during war time, and, despite protective laws of long standing, of a high demand, with corresponding prices, for eggs. Parts of the Scottish isles have a long-standing tradition of sea-bird eggs as a major, even the chief, item of human diet. Such traditions, even though legally repressed, are often harbored in the minds of inhabitants as a natural right, so that reversion to primitive reaction is not far below the surface of modernity.

In our own country, wild birds—in addition to those now legally classed as game—have often been eaten, and at one time 'egging' was a regular commerce at sea-bird nesting sites on both coasts. Even now, where there are large concentrations of edible birds and eggs in the neighborhood of settlements of foreigners, or of native-born Americans with low subsistence margins, there is apt to persist an irreducible minimum of illegal pot-hunting and egging of non-game birds. If the war causes drastic changes in the food

resources of the underprivileged or ignorant, and loss of part or all of their cash incomes, there may be raids on our sanctuaries that will demand all the authority and watchfulness the National Audubon Society can muster in defense.

There may even be proposals of wild-eyed schemes, by those who should know better, to 'solve' real or imagined food shortages by extending or opening the season on scarce game now enjoying much or complete protection. An unfortunate corollary would be a campaign against predators, in which sportsmen would be urged to take a hand. We shall oppose all such proposals, and we have confidence that government agencies charged with wildlife protection will oppose them.

Deer Slaughter

You know, if you've read this report for the past few months, that this Society dispatched into the field the outstanding wildlife management authority, Herbert L. Stoddard, to try to discover, among other things, whether the deer of the Seminole Reservation in Florida were actually hosts to the cattle-fever tick, as claimed by those who want the deer all slaughtered. You know that the long-hostile Seminoles had just been won to friendship with the whites, for the first time in history, when the Bureau of Indian Affairs promised them that the game on their land would not be molested. Then the Department of Agriculture insisted upon destruction of all the deer.

Barely consenting to recognize that we were making a fact-finding investigation by an outstanding authority, the Department of Agriculture warned in writing that no matter what Mr. Stoddard concluded, it would not be swayed by his facts; this in the face



Photo by Allan D. Cruickshank

OILED OLD-SQUAW

On war-troubled waters oil from torpedoed tankers means almost certain death for seafowl coming in contact with it.

of our being earnestly requested, by the Department of Interior, to undertake independent sponsorship of financing of such undertaking. News that he has as yet not found on the Hendry County Seminole Reservation a single tick of the subspecies which, it is claimed, cannot be controlled by dipping, has already leaked out. It no sooner got abroad than a 'rider' was rushed through to attachment on the Agricultural Supply Bill in the House of Representatives. It provides for destruction of the deer, at the expense of John Q. Taxpayer, supplying of beef to the Seminoles (with the amiable John Q. as host) and restocking of the reservation with other deer (and just charge it to J. Q. T.'s unlimited account). More, a parliamentary device embodied in the bill required the House to swallow the bill

in entirety or not at all. We brand this rider as irrelevant and not germane.

Now the bill goes to the Senate; the desire to rush it through seems to be actuated chiefly by fear of possible need of anticipating publication of the Stoddard findings; they might prove that the execution of the deer-killing order would be unnecessary.

Can You Tie That!

For almost forty years, we have bent the best efforts of this organization to the protection of birds, and above all we have opposed the destruction of bird life for the sale of its plumage.

The passage of the Desmond amendment to the new 1941 plumage law in New York State was contrary to our recommendation; we want to tell our friends that we never yielded to any compromise proposals. We had only

to back down on the principle of no commercialization, at any time, to obtain a truce. But to do so would have been to accept defeat with our colors lowered and dishonored. We preferred to go down, if at all, with our flags flying.

Where does the whole question of the exploitation of wild-bird plumage, then, stand now? It stands this way, that the feather industries (and its customers, the women of America) have, by agreement and by law in New York State, accepted an ending of commercialization of wild-bird feathers for their purposes—chiefly millinery and other ornamentation. This much of the law is still in effect, and very proud we are of having won that battle. But the fishermen can buy wild-bird plumage for their flies.

It is a matter of fact that, after decades of effort, water-tight legislation was obtained; yet a hole has immediately been breached in the law, one that will make possible the destruction of American and foreign wild birds for commercial profit. Until that hole is plugged, we shall not rest.

New York State Senator Desmond, for many years a loyal supporter of Audubon policies and a director of the Society, sided with the fly-tyers. He presented his case before our Board of Directors, but finding no agreement possible, he immediately handed in his resignation. With deep regret it was accepted unanimously.

The commercialization of wild-bird plumage may, however, be thrown into an entirely different light by a recent Federal order putting a ban on the sale of all duck and goose feathers for the present, until the need of this type of plumage for Army uses has been satisfied from existent stocks.

Statistics on Tap

In a serious effort to make its ap-

pearance more attractive, uninteresting looking financial statistics and seasonal bird records have not been printed in the body of this magazine for a couple of years. Of course, every member knows that copies of the financial statement of the Society and of the Treasurer's report are available at any time to any member who asks for them. Both are presented in full at the annual members' meeting, at which, however, the attendance is relatively small. Both are on permanent record at Audubon House for any member to peruse at any time. Perhaps, as we have hoped, it will be possible to finance the publication of a separate annual report, which naturally would contain data of this kind. We realize that most of the members would doubtless consider it an extravagance on our part, especially in these times, if we were to go to the expense of mailing to each of them a copy of the financial statement alone.

The directors are rightfully proud of the sound financial condition of the Society and the conservative policies which have been followed with regard to its invested funds. Reserves have been set up for market revaluation of investments, as well as a reserve for contingencies. Endowment funds have been carefully classified with regard to restrictions, if any, upon use of principal or income, and as to requirements for separate investment. The particular stipulations of all donors have been carefully recorded and observed. Members may rest assured that any proper questions with regard to financial condition of the Society will be gladly answered.

This Is Our Story

"America, my country," was John James Audubon's life motto. It is also the title of a 48-page brochure issued in January by the National



Photo by Allan D. Cruickshank

ARCTIC TERN

We are dedicated to preserve in America such sights as this—an integral part of our wildlife heritage.

Audubon Society, with subtitle of *Our People's Heritage*. It tells, using quotations from leading authorities of the past and present, from George Washington and Audubon to Ira N. Gabrielson and President Roosevelt, what the aboriginal abundance of our American wildlife resources was, how it has been despoiled, and how it can be saved by conservation. It tells, too, of the way in which, and for what purposes, the National Audubon Society was formed, of what is its rôle today in our world at war, and what its needs are, if it is to continue to make its unique contribution to our national life.

We issued this little book in the hope that it would please our friends and make us better understood by those who have only a nodding acquaintance with us and our work. Already the spontaneous response has been gratifying.

Mr. Alan Devoe, the delightful nature writer, writes: "*America, My Country*, is properly describable as superb . . . Restrained eloquence that is deeply moving . . . Conservation question presented with fine lucidity and persuasiveness . . . It should be feasible for me to allude to it in my monthly department in *The American Mercury*."

From the Fish and Wildlife Service writes O. J. Murie: "I don't think that I have seen a better presentation of the Society's cause and that of conservation . . . It would be utterly stupid to apply the scorched-earth policy to our homeland in the excitement of war . . . You have presented the matter eloquently and convincingly in the pamphlet . . . I presume that it may be quoted in writing on conservation."

Mr. Murie presumes correctly. Any writer or lecturer may dip his bucket in these pages and bring up for use as much as he likes, without asking per-

mission. We would be grateful if he acknowledges the National Audubon Society as the source.

Hail and Farewell

If there is anything that a solid businessman takes pride in, it is 'an old account.' For forty-three years, Dr. Frank M. Chapman and this Society placed the publication of *Bird-Lore* and this magazine in the competent hands of the J. Horace McFarland Company of Harrisburg, Pennsylvania. From that printing establishment, owned by the distinguished horticulturalist, writer, and patron of science, Mr. McFarland of Philadelphia, for nearly a half century flowed the beautiful typographical workmanship of *Bird-Lore*, as this magazine until 1941 was called. Such satisfactory 'old accounts' become in time personal as well as business friendships; they are inherited, like family friendships, by succeeding generations. Only the present need for the very strictest economy in the cost of producing and distributing this magazine could have induced us to seek any other printer than the Mount Pleasant Press. We have been obliged by circumstances, however, to accept the tactical advantages of the Charles Francis Press here in New York City. With this firm, too, we have long had satisfactory relations, and we feel confident that *Audubon Magazine* will not suffer in its high standard, in the hands of this reliable outfit.

Going to Take a Census?

For the sixth successive year, we are planning to print in our September-October issue the results of this year's breeding-bird censuses. We want to enroll all former and many more new participants in this important project. Drop us a note if you do not already have a copy of the regulations; we will gladly lend all possible assistance.



The Changing Seasons

By
Ludlow Griscom



SPECIAL conditions in California can expediently be mentioned first. Abnormal weather conditions for the period in central California were record rains, and Dr. Linsdale is at pains to point out the many changes in bird life with the cumulative disturbance in food supplies of various kinds. These factors are of greater weight in California than the variations in migration due to climatic factors, which are all-important in most of the continent. In southern California the fall was warm, with heavy rains in November. December was cold, while January was so mild that the breeding season began at the end of the month. It is a pleasure to welcome Mr. Howard L. Cogswell as the new recorder there.

In southern California particularly there were numerous late stragglers and the arrival of winter visitants averaged late. Some great concentrations of Robins were reported in central California. Near Davis, rats and mice were notably common, attracting numbers of hawks and owls, particularly notable being Ferruginous Rough-legs, which were also reported from southern California. Lewis's Woodpeckers were above normal in both regions. Mr. Cogswell stresses the number of Loons, Grebes, Egrets and Glaucous-winged Gulls. In the San Joaquin Valley, it is good to read of 7000 Cranes in one place, 4000 in another, and Mountain Plover common.

The National Audubon Society should feel much indebted to numerous members of the U. S. Fish and Wildlife Service for their fascinating Christmas bird counts from many of the important refuges. From the Atlantic Coast to the Gulf Coast and California, we have reports of over 100,000 waterfowl in several places, and 5 Whooping Cranes in Texas.

East of the Rocky Mountains one broad generalization can be made. The fall was mild to very warm throughout, and January was either mild throughout or cold only for a brief period. The early southward migration in the Northeast was continued through October and November in spite of the mild weather. But all reports emphasize the number of late stragglers, particularly remarkable in the Dakotas, Minnesota and the extreme South. The Christmas counts list certain species—Franklin's Gull, Least and Black Tern, Golden Plover, Pectoral Sandpiper, Yellow-billed Cuckoo, and even a Scissor-tailed Flycatcher (in the Florida Keys of all places!)—hardly if ever before reported from the United States in winter.

After a good breeding season, geese were reported as abundant throughout the continent. Ducks were up in numbers in all the great concentration areas, but down in the far South from Florida to Texas, perhaps because of warm weather. The Redhead, unfor-

tunately, was again reported down in many sections. Brant showed an increase from Long Island to North Carolina, and the number of Blue Geese on the Atlantic seaboard doubled.

The far South still complains of a scarcity of small winter land birds, and has not yet recovered from the severe freeze of January 1940. The Bluebird and Marsh Wrens have fully recovered, the Phoebe and Hermit Thrush only partially; Woodcock, Snipe and Killdeer are still scarce.

Harlequin Duck, very few from Massachusetts south to Long Island; King Eider, very few south to Cape May, N. J.

Goshawk, moderate flight to New Jersey and Pennsylvania, very few in New England. Golden Eagle, numerous in North Dakota, 1 in Massachusetts, 1 in New York, 1 in South Carolina. Black Gyrfalcon, 3 in Massachusetts, 1 in Reading, Pa.

Glaucous Gull now regular on the Great Lakes; Iceland Gull south to Pennsylvania. European Black-headed Gull, 1 adult, Newburyport, Mass., October 12 to date; 1 in Rhode Island, November 22. Little Gull, 1 on Long Island, N. Y.; 1 in Ohio. Forster's Tern, fine flight northeast Atlantic States to mid-November. Black Skimmer, extraordinary flock of 10,000 in south Florida during February (Thomas Barbour).

Shore birds, remarkably late and common on the Atlantic seaboard; flock of Avocets in southern New Jersey; 65 Marbled Godwits on Pea Island, N. C., January 22, second winter record for the State.

Snowy Owl, one of the great flight years, beginning in mid-October, south to Pennsylvania and Kentucky. A small southward movement of Three-toed Woodpeckers; Arctic in western Massachusetts; American records from Quebec and Ottawa, Ontario.

Black-capped Chickadee, a great invasion from Canada to New England and Great Lakes States, south to Ohio and Delaware; two to five times as numerous as usual. Third flight in history of the Acadian Chickadee south to New York City; the Hudsonian in Minnesota.

Red-breasted Nuthatch, great influx in interior south to west Florida and Texas. Golden-crowned Kinglet, great flight through Atlantic States. Raven, 1 in Massachusetts on October 26, 1 on Long Island on December 28, 1 at Rye, N. Y., December 28. Bohemian Waxwing, common in North Dakota, moderate flight in Minnesota, 1 in Massachusetts on November 2, 1 in New York on January 5.

Evening Grosbeak, great flight to Atlantic seaboard States from Maine to Pennsylvania. Pine Grosbeak, south in small numbers to South Dakota, Wisconsin, Chicago and northern New Jersey. Redpoll, south to South Dakota, Wisconsin, Ohio and northern New Jersey in small numbers. Pine Siskin, south to Georgia (Hebard *in litt.*), Tennessee and Iowa.

Other freak records: a Blue Goose in New Mexico; a Brown Thrasher in southern California; a Blue Grosbeak on Long Island on October 12 and Cape Cod, Mass., October 13; a Black Vulture in Maine.

—Cambridge, Mass., March 7, 1942.



FOR THE BOYS WHO "KEEP 'EM FLYING" . . .

Recently we received a letter from a boy who is serving in the armed forces of our country that we would like to share with *Audubon Magazine* readers.

"Ever since my days in grammar school my main hobby has been an intense interest in wildlife—particularly birds and their conservation. In this work I know that the National Audubon Society is the outstanding inspiration. One of my particular hopes has been to be an active member of your Society. However, continued attendance at school and college has kept my funds (up to Jan. 1942) at an extremely low level. Now that I am in the Army as a private, my active participation looks even more remote. However, I wish I could keep up with 'goings-on' of the Society through its publication. Formerly I went to my local library where I could read *Audubon Magazine*, but an army camp offers absolutely nothing in this sort of reading. To make a long story short, I have managed to scrape together 35¢ for which I wish you would send me the latest issue. My army pay of \$21.00 per month doesn't allow for the full subscription price of \$2.00—much as I wish it did."

This boy is probably only one of many who, while "keeping 'em flying" for Uncle Sam, is now cut off from all news about that other phase of "keeping 'em flying." Much as we regret it, it is not possible for us to provide all such boys with free subscriptions, but it is possible that some of our readers might heartily welcome an opportunity to provide one boy in the service, now deprived of an *Audubon Magazine* contact, with a year's enjoyment of the magazine. If you would like to be included in this plan, clip the coupon at the lower right-hand corner of this page and return it to us with check to cover subscription price. We will see that the boy first in line when your check is received is presented with your generous gift, for which a card will be sent him in your name. We will also advise you of his name and address.

TO YOU WHO "KEEP 'EM FLYING"

If you wish to participate in the above plan, the line is forming through sending in the coupon at the lower left-hand side of this page. It's first come, first served. These subscriptions will be given out, as they are received from donors, in the order in which your requests are received.

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I would greatly appreciate receiving one of the "Keep 'Em Flying Gift Subscriptions" to your magazine.

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I would like to sponsor one "Keep 'Em Flying Gift Subscription" to your magazine and enclose my check for \$2.00.

What Does My National Audubon Membership Mean to Me Today?

by EMILY R. DENTON

*Winner of second prize in contest recently sponsored
by the National Audubon Society on this subject*

My Audubon membership has given me that most enduring of human delights, that of sharing with others a sincere and genuine enthusiasm. I have always loved birds and animals, but often with the feeling that I was alone, or nearly alone, in my affection. Now I realize, as never before, in how great a company I walk. I do not believe I could ever be lonely in the same way again.

Realizing how the ranks of many species of wild things have been dwindling year after year, and conscious of the general apathy permitting this condition to continue, I have often felt painfully helpless, unable to check, except in a few isolated instances, the criminal waste of a beautiful and complete heritage. My membership has changed this, has given me the confidence that the battle is going forward, and that human beings have taken the part of the victims in this dreary carnage.

The Society has directed and stimulated my interests, clarified my mind on many points where my knowledge was confused, and given me a greater intimacy with the creatures of garden and forest. It has helped me to give them the surroundings they like, to which they will return, and so enriched a whole department of my life.

Finally, the Audubon Society has given me contact with an agency whose concern is with the continuing realities. It grows more and more difficult to find the answers to problems of increasing complexity, to keep from utter despair in a world where the emphasis is upon destruction. Here, I know, I shall find fellowship with those whose purpose is to save and not to kill, to perpetuate for all of us a 'bower of quiet,' in which we may rest and regain an undistorted perspective of ourselves and our environment.

AUDUBON LIVING MEMORIALS

There are few normal human beings who have not on occasion dreamed of a memorial which they would like to leave to posterity . . . sometimes in their own names, but more often to keep alive and to share with others the memory of a member of the family circle or of a friend.

Good fortune in the choice of such a memorial attends all those who have found pleasure in an understanding of nature, who have known and understood the birds of America, the creatures of the wild, and the great American outdoors. For they have an opportunity to reflect this interest by establishing a *living* memorial, which so long as life endures on this earth, will make its manifold contributions to all mankind.

The program of the National Audubon Society presents a number of unusual opportunities for the establishment of such living memorials. The officers and directors of the National Audubon Society will be glad to confer with anyone contemplating the establishment of a memorial, and will also welcome an opportunity to discuss the Society's needs, now or in the future, which may be met either through current gifts or bequests.

FORM OF BEQUEST FOR GENERAL PURPOSES

I hereby give, devise and bequeath to the NATIONAL AUDUBON SOCIETY, in the City of New York, in the State of New York, the sum of _____ dollars (or otherwise describe the gift), to be used for the general purposes of said Society.

A unique idea...

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Not the birds themselves, of course, but a painting in color that will bring back vivid memories of your visit to their coastal breeding grounds.

ORIGINAL TWO-COLOR PAINTING

By ROGER TORY PETERSON

The National Audubon Society offers the cover of this issue of *Audubon Magazine* for \$50

Size of painting, 11 x 9½, mounted and ready for framing.

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Perhaps you would prefer to own the original two-color painting of the

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(cover illustration of issue for September-October, 1941. Size of painting, 11 x 9½.)

or the

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(cover illustration of issue for July-August, 1941. Size of painting, 11½ x 9½.)

Both are mounted and ready for framing.

Towhee and Plovers, each \$35

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Upon request of purchaser and without extra cost, Mr. Peterson will add full color to these two-color paintings.

○

NATIONAL AUDUBON SOCIETY
1006 Fifth Avenue New York, N. Y.

Letters

Sirs:

If you have reprints of the life-zone paper by Roger T. Peterson, I'd appreciate getting one. It's quite the best discussion I have read recently.

ALDO LEOPOLD

Dept. of Wildlife Management

University of Wisconsin
Madison, Wis.

•

Sirs:

The Editors of *Audubon Magazine* are to be congratulated for directing their readers' attention to a much-neglected subject of life in the wild. I refer to the article by C. Brooke Worth, 'What Killed Cock Robin?' in the January-February issue. It is capably presented, although marred by one error of fact regarding *Mallophaga* which are not confined to the marsupials among mammals, for the genus *Trichodectes* infests several species of domestic animals . . . We hope that the Society will encourage further contributions of the same general nature as 'What Killed Cock Robin?' especially if contributed by such able men as Worth. The subject is obtuse, and beyond the popularizing ability of most of us.

PAUL D. HARWOOD

Ashland, Ohio

•

Sirs:

I have received the most interesting January-February number of *Audubon Magazine* but no Christmas Census with it. As I have been watching the mails like a hawk ever since Christmas, I fear that there has been some mistake. . . .

STEPHEN LEE GAILLARD

Bronxville, N. Y.

Some months ago *Audubon Magazine* notified all of its readers that copies of Section II would be mailed only to those persons who indicated a desire to receive this part of the magazine by returning a card sent them. A small supply of Section II for the November-December and January-February issues is still available to those who may have overlooked this notice.—Ed.

•

Sirs:

. . . And now may I tell you what I think of your magazine? I have never read anything so interesting to bird lovers. I only wish it came out every month. The articles are fascinating . . .

MRS. DALE BOCKES

Grundy Center, Iowa

When writing advertisers, mention *Audubon Magazine*